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# The Mediating Effects of Job Engagement between Spirituality at Work and Performance

Eileen Lai

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2012

# The Mediating Effects of Job Engagement between Spirituality at Work and Performance

by

Eileen Lai

Submitted to Lee Kong Chian School of Business in partial fulfillment of  
the requirement for the degree of Master of Science in Management

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## **Abstract**

This research study explores the mediating role that work engagement plays between spirituality at work and performance. Spirituality at work is measured by four dimensions of meaningful work, having a sense of community, alignment with corporate values and having an inner life. Work engagement is recognized to comprise of physical, emotional and cognitive engagement (Kahn, 1990). Performance, on the other hand, refers to in-role behaviours, organizational citizenship behaviours – individuals (“OCB – I”), organizational citizenship behaviours – organizations (“OCB – O”) and employee creativity.

My main contribution to the management, spirituality and religion (MSR) scholarship is the extension of the Job Demands-Resources (JD-R) model in the work engagement literature to include spirituality as a resource. The JD-R model was developed with only one resource - job resource. Later developments extended the model to include personal resource. And in this proposal, I would further extend the JD-R model by arguing that spirituality at work is also a resource that individuals can draw upon. My argument is mainly supported by the conservation of resources theory and the self-determination theory.

Based on the responses of 300 individuals working in Singapore and across a variety of jobs and industries, results confirm that all types of work engagement (i.e. physical, emotional and cognitive) have full or partial mediating effects between all dimensions of spirituality at work (i.e. meaningful work, sense of community, alignment with corporate values and inner life) with all types of performance outcomes (i.e. in-role behaviour, OCB – I, OCB – O and creativity)

except for the relationships between sense of community and inner life to in-role behaviour and between inner life to OCB – O, where no mediating effects are found.

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## **Chapter 1: Introduction**

### **1.1 Motivation for study**

The MSR (Management, Spirituality and Religion) research was resurrected in the 1990s and have been prolific since then because having spirited workers seem to be able to potentially benefit the organization. In the spirituality at work literature, one book: “A Spiritual Audit of Corporate America” by Mitroff and Denton (1999) stands out. This book called on management to employ a culture of spirituality to ensure individuals find the appropriate meaning and purpose in their life. In fact, it carries a citation count of almost 300 times by 2011 and some authors pointed out that this book was cited as the most prominent empirical Spirituality, Religion and Work (SRW) study to date (Long and Mills, 2010).

It is no surprise then that organizations would want and in fact, need their employees to be successful because it will in turn help the organizations be more competitive and thus successful. In these challenging and competitive times, many individuals also put in long hours at work and have to race in order to win the rat race. To win, they also result to displaying not just behaviours as required and in accordance with their job descriptive but also in going beyond what is officially required. To stand out, they have to constantly be challenged to think of better, creative and feasible solutions for the organizations to excel. Indeed, as they out-serve, they also put in more hours at work and with their busy schedule, have lesser time for friends, family and for themselves. Leisure time also goes down and gradually, many employees turn to their work as their whole life and passion and thus, aspire to push themselves harder and achieve great heights at work, giving them a great sense of achievement. Not all employees are created equal

though and there will always be corporate free-loader who does not contribute as much to the corporations as compared to the high achievers. The question to ask, perhaps, is how then can we inspire these free-loaders to perform and also, how can we continue to motivate high achievers to produce great work so that they don't burnout?

Spirituality seems like a possible answer. Long and Mills (2010) referenced Mitroff and Denton's (1999) work and re-iterated that organizations now achieve meaning as places where individuals can also self-actualize. In fact, they found that organizations that identify more strongly with spirituality or have a greater sense of spirituality have employees who reportedly brings significantly more of their complete selves to work, specifically their creativity and intelligence – the two qualities that are critical for organizations to succeed in today's hypercompetitive environment.

Yet, many authors have questioned on ethical grounds as to whether the use of spirituality at work is exploited for the sake of the organization's profitability instead of "treating people as complete human beings as the right thing to do" (Dehler and Welsh, 2003, p. 115). Other authors claimed that corporate culture could be used to control employees' mind where they are forced to adhere to corporate values and converge instead of being left free to understand their own reality and explore other alternatives present (Long and Mills, 2010). Morgan, (1997), asserted that employee's reality is now being controlled and Bell and Taylor (2003), further accused: "workplace spirituality ensures that the search for meaning is harnessed to specific organizational purposes" (p.332).

Spirituality have also, on other occasions, been largely been considered to be a personal and private matter on one hand, while the work life, belongs to the more public domain. In fact, Wisely and Lynn (1994), documented work as a messy public necessity, distracting at best, spirituality desiccating at worst.

In reconciling the above positions, it seems like work and life may be able to co-exist and is a virtuous cycle, especially in the context of today's demanding work environment and long working hours. As Sheep (2006) pointed out: "If organizations can nurture the whole person and benefit tangibly at the same time, why would that not be a worthy goal? If work is serving man such that man are able to self-actualize while working, assuming that man cannot otherwise realize their full potential, it is a great thing for mankind: "The workplace is one of the most important settings in which people come together daily to accomplish what they cannot do on their own, that is, realise their full potential as human beings" (Mitroff and Denton, 1999, p.7)

Thus, if indeed, the role of work is to help actualize man, then men would treat spirituality at work as a valued resource and commodity and be able to be engaged and enjoy their work and thus life too! This may potentially remove the voids of life and the emptiness faced by many in our modern society. The engaged man would in turn also boost work since nourished souls can serve people, either customers or fellow colleagues better (Sweeney, 2007). Epps (1995) highlighted that that doing business with a spirited organization is a delight and when missing spirit, working becomes a drag, whether as a customer, vendor or employee. Epps (1995) further posited that whilst spirit is intangible, its effect does permeate the

entire system and determine the quality of output and should not be left to happenstance.

Yet, having spirited man may or may not directly lead to organization performance per se. What then, could clarify the relationship between spirituality at work and organization performance? The link is indeed not a straightforward one. Some authors have put forth some potential link between the two. For example, Tan and Geh (2010) established organizational based self-esteem as the mediating factor between spirituality at work and organization performance such that spirituality at work leads to organizational citizenship behaviours because with spirituality at work, individual employees tend to develop high self-esteem and maintain more favourable work attitudes.

In this study, I will explore yet another link between spirituality at work and performance using the construct work engagement as the mediator between spirituality at work and performance.

## **1.2 Objectives of study**

The objectives of this study are as follows:

- 1) To bring the various definitions of the construct, spirituality at work, up to date
- 2) To develop a theoretical model to explain how spirituality at work affects performance including in-role behaviours, extra-role behaviours affecting the individual, extra-role behaviours affecting the organizations and employee creativity through work engagement as the mediator.

- 3) To design a survey using existing scales in the literature and thereafter, collect data to empirically test the theoretical model.
- 4) To derive managerial implications based on the findings of this study.

### **1.3 Contributions of study**

In the realm of theory development where the construct spirituality at work is concerned, there exists no unified definition, explanation or impact of spirituality at work. To place spirituality at work in the literature, a starting point would be to trace the evolution of the construct and thereby develop a better understanding. This study will also explore work engagement as a mediator and thus will review the background of work engagement too.

This study will also collect primary data to test the theoretical model developed to explain the relationship between spirituality at work, work engagement and performance. The theoretical model will link spirituality at work to the desired performance outcomes and for the first time, investigate the mediating role of work engagement between spirituality at work and performance outcomes.

### **1.4 Overview of study**

In chapter 2, this study will review the literature on spirituality at work and the conceptual bases underlying this study. This will include the bringing the definitions of spirituality at work up to date.

Further, the background of work engagement will be explored and thereafter, the recent developments in the field will be discussed so as to deepen our understanding of work engagement and explore its role as a mediator.

In chapter 3, the theoretical model will be presented together with the hypotheses. The methodology section will be discussed in chapter 4 and the results analyzed in chapter 5. Thereafter, in the final chapter, the conclusions, limitations and possible future research directions will be discussed.

## **Chapter 2: Literature Review**

### **2.1 Introduction**

The phenomenon of spirituality at work has been gaining popularity in the last decade. This is against the backdrop of management consultants, managers and researchers all in search of creating higher productivity while at the same time, being required to create a work environment that more fully enriches the life of each employee (Johnson, 2007). With a more enriched life, employees would have better attitudes, thus boosting performance and benefiting the organizations that they are affiliated to.

Interest in spirituality at work is evident in the extant literature. Case and Gosling (2010) cited Oswick's (2009) research where Oswick performed a bibliometric analysis of texts over two decades and concluded that there is a relative proliferation in recent years of spirituality discourse within management studies and the social sciences more generally and that the relatively early stirrings of attention given to the subject in the 1990s has given way to a veritable flood of analysis, diagnosis and prescription on the part of organizational scholars, practitioners and popular management writers and that this field is rapidly emerging as a specialist subfield of organization and management studies and is also indicative of the growth in interest in workplace spirituality. This led Case and Gosling (2010) to conclude that "to suggest that there has been a growing interest in workplace spirituality in recent years would be to court understatement" p.257. Also, Poole (2009) claimed that "Organisational spirituality has now become an accepted focus for academic research" (p. 577).

The rise of people-centered management was a contributing factor towards the focus on spirituality at work (e.g., Burack, 1999). The distinction between people-centered management from their counterparts, according to the same author, is that the former does not merely talk about the importance of people but rather, actually invests in their workforce, weaving the idea that people is indeed a competitive differentiator into their cultural fabric. Fawcett (2008) also believes that organization cultures should be people-centered and should take on a spirit that is inspiring instead of limiting to be successful. In citing Epps (1995), the author stated that doing business with a spirited organization is a delight and when missing spirit, working becomes a drag, whether as a customer, vendor or employee. Whilst spirit is intangible, its effect does permeate the entire system and determine the quality of output and should not be left to happenstance.

The factors of organizational spirituality, according to Fawcett (2008), are: Core values, organizational climate and workplace attributes. Core values includes community and teamwork that must be shared by the organization and its people as values congruency fosters a sense of connectedness and wholeness that in turn facilitates both the individual and organizational growth. Organizational climate, on the other hand, must then come in to support the core values and three aspects of workplace climate – affirmation (need to feel valued), belonging (need to feel connected) and competence (need for growth) –were identified as antecedents to a creative and productive workforce. Workplace attributes, the last factor of organizational spirituality, helps align worker's work habits to the core values of the organization and instil a culture of success. Examples of attributes identified in the extant literature are: having work that is valued, work that stretches worker's



capabilities, high-quality interpersonal relationships, efforts that are recognized, supported and rewarded, managers who act as guides, having the opportunity to find meaning in work that transcends economic gain, a strong work ethic, empowerment, collaboration, respect for workers, commitment to a cause, ability to take care of the customer, opportunity to learn from mistakes, responsibility to behave in a self-managing way and having clear and consistent leadership. Using values research, Fawcett went on to develop a hierarchical value map that tells managers to focus on six job climate of affirmation (managerial behaviour and intrinsic work design), belonging (personal and co-workers) and competence (personal and managerial) in order to cultivate an inspiring culture and unleash the creativity and contribution of the workforce. An inspiring workplace climate leads to important personal benefits for the employees that reinforce the culture of success. It also influences the values held by the workforce and the ability to contribute meaningfully promotes the desire to contribute in unique and enterprising ways, initiating a “cycle of creativity” (p.435). Further, she further stated that a sense of community is founded on “self-confidence and positive mood” (p.435).

In Mitroff and Denton’s (1999) book titled: “A corporate audit of Corporate America”, the authors noted that organizations that identify more strongly with spirituality or have a greater sense of spirituality reportedly have employees who bring significantly more of their complete selves to work, specifically their creativity and intelligence in the performance of their jobs. These two qualities are especially needed for organizations to succeed in today’s hyper-competitive environment. This same study also indicated that increasingly, employees are

hungry for ways to practice spirituality in the workplace. Also, having a strong set of deeply-held spirituality values such as living by your inner truth to produce positive attitudes and relationships in your life not only benefits one's personal life but also organizational performance via enhanced intuitive abilities and individual capacity for innovation, as well as increasing personal growth, employee commitment and responsibility (Neck and Milliman, 1994). Neck and Milliman (1994) linked spirituality at work to Maslow's concept of self-actualization and postulated that spirituality is about fulfilling human potential, thereby leading to competitive success.

Ashmos and Duchon (2000) argued that five societal trends have led to the increasing need for spirituality in the workplace: First, workers are demoralized due to downsizing, reengineering or layoffs; second, there is a decline of neighbourhoods, churches, civic groups and extended families as principal places for feeling connected and hence the workplace is now the substitution as the primary source of community; third, there is a curiosity about Asian cultures and philosophies which emphasizes meditation, loyalty and finding one's spiritual center in any activity; fourth, there is concern with aging and the meaning of life; and finally, the global competition has led to the need to gain competitive advantage by fully utilizing the individual, including the heart and fostered spirituality.

With the increasing focus on spirituality at work, many authors since the 1970s have been attempting to provide a definition of the construct. There exist more than 70 definitions of spirituality at work but that there is no widely accepted

definition (Markow and Klenke, 2005). Maher and Hunt (1993) further highlighted that the definition of spirituality is elusive, value laden, seemingly culturally, religiously and ethically bound that any meaningful investigation “appears at once to be an exercise in futility”. In fact, spirituality is a difficult term to operationally define (Miller, 2004).

Spirituality at work is often linked to religion. Interestingly, prior to the twentieth century, the terms spiritual and religious appears to be synonymous in the English language (Fuller, 2001). Wuthnow (1996) noted that attempts to connect spirituality and religion to work are highly idiosyncratic and very much influenced by the individual's personal experiences and the multiple religious languages that he may have been exposed to. Gradually, spirituality became detangled from religion and Fuller (2001) documented that the term spirituality gradually evolved to be associated with the “private realm of thoughts and experience while religious, on the other hand, came to be associated with the public realm of membership in religious institutions, participation in formal rituals and adherence to official denominational doctrines” (p.5). Cavanagh (1999) and Mitroff and Denton (1999) similarly made a distinction between spirituality and religion and noted that spirituality does not involve a connection to any specific religious tradition and is instead, based on one’s own personal values and philosophy. Hill and Pargament (2003), also noted a polarization of religiousness and spirituality with the former representing an institutional, formal form of tradition and the latter linked to individual, subjectiveness, emotions, free expression, etc. Also, spirituality is generally referred to as overarching framework that orients people to the world and provides motivation and direction for living. Spiritual strivings are

also deemed to be empowering where people are likely to persevere in the pursuit of transcendent goals – spiritual strivings provide stability, support and direction in critical times where people can actually hold on to a sense of ultimate purpose and meaning in critical periods of their lives. In fact, people who have more spiritual strivings indicate greater purpose in life, better life satisfaction and higher levels of well-being. Hawley (1993) quite succinctly pointed out then that “spirituality was the goal and religion is only the path” that leads individuals to the spirituality goal (p.3).

This chapter's objective is thus fourfold. First, I will provide a review of the extant literature on the definition, development and empirical findings of the construct spirituality at work. Secondly, I will discuss the construct work engagement and also highlight the empirical findings. Thirdly, I will use the self determination theory and the conservation of resources model as the conceptual bases underlying this study. Finally, I will summarize and pen down my concluding thoughts on the relationship between spirituality at work and work engagement.

## **2.2 Definitions of Spirituality at Work**

As highlighted earlier, the definition of spirituality at work remains controversial and difficult to define. This section is dedicated to review the extant literature for the existing definitions of spirituality. I have used a convenient and practical starting point in this quest to search the various definitions available on spirituality at work and this starting point would rely on the handbook of workplace spirituality and organizational performance by Giacalone and Jurkiewicz (2005). In the handbook, the early beginnings of the definition of spirituality at work were

traced in a table reproduced in Table 1 below. It is interesting to note that the authors concluded that there exist no clear definition of spirituality and that this absence is not due to a lack of effort.

Although convenient, the definitions in the handbook are only documented up to Year 2000. Please refer to No. 1 – 13 in Table 1. I will attempt to bring Table 1 up to date by sampling the existing literature for later definitions of the construct – spirituality at work. I will extend Table 1 with my findings (i.e. definitions by later researchers). It is my hope that with this extension, a deeper understanding of the construct can be achieved.

---

Table 1: Definitions of spirituality at work

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No.	Author and year	Definition of spirituality at work
1	Tart, 1975, p.4	Vast realm of human potential dealing with ultimate purposes, with higher entities, with God, with life, with compassion, with purpose
2	Shafranske and Gorsuch, 1984, p.231	A transcendent dimension within human experience... discovered in moments in which the individual questions the meaning of personal existence and attempts to place the self within a broader ontological context
3	McKnight, 1984, p.142	The animating force that inspires one toward purposes that are being one's self and that give one's life meaning and direction
4	Mauritzen, 1988, p.118	The human dimension that transcends the biological, psychological and social aspects of living
5	Elkins et al., 1988, p.10	A way of being and experiencing that comes

		about through awareness of a transcendent dimension and that is characterized by certain identifiable values in regard to self, life and whatever one considers to be the ultimate
6	Benner, 1989, p.20	Our response to a deep and mysterious human yearning for self-transcendence and surrender, a yearning to find our place
7	Dale, 1991, p.5	A subjective experience of the sacred (Vaughn, 1991, p.105); that human striving for the transforming power present in life; it is that attraction and movement of the human person toward the divine
8	Chandler and Holden, 1992	Pertaining to the innate capacity to, and tendency to seek to, transcend one's current locus of centrality, which with transcendence involves increased knowledge and love
9	Emblen, 1992, p.45	A personal life principle which animates as transcendent quality with God
10	Armstrong, 1995, p.3	The presence of a relationship with a higher power that affects the way in which one operates in the world
11	Bregman and Thierman, 1995, p.149	How the individual lives meaningfully with ultimacy in his or her response to the deepest truths of the universe
12	Wong, 1998, p.364	That which involves ultimate and personal truths
13	Emmons, 2000, p.4	The personal expression of ultimate concern
14	Canda and Furman, 1999, p.5	A universal aspect of human experience concerned with the search for a sense of meaning, purpose, and morally satisfying relationships with self, other people, the universe, and ultimate reality, however a person or group understands it
15	Mitroff and Denton,	The basic feeling of being connected with one's

	1999, p.83	complete self, others and the entire universe
16	Ashmos and Duchon, 2000, p. 137	The recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of community
17	Dehler and Welsh, 2003	A search for meaning, deeper self-knowledge or transcendence to a higher level
18	Tepper, 2003, p.183	The extent to which an individual is motivated to find sacred meaning and purpose to his or her existence
19	Giacalone and Jurkiewicz, 2003, p.13	A framework of organizational values evidenced in the culture that promotes employees' experience of transcendence through the work process, facilitating their sense of being connected to others in a way that provides feelings of completeness and joy
20	Doe, 2004, p.47	The power of ultimate (or divine) reality that creates and sustains human desire to achieve optimal social relationships
21	Travis, 2004	The sake of wakefulness that is essential and unmixed with images, thoughts, feelings or any other objects of perception
22	Dent et al., 2005, p.627	A framework of organizational values that can lead workers to think that they are connected with each other as a whole and they should transcendence on their works
23	Marques, 2005, p.87	An experience of interconnectedness and trust among those involved in a work process, engendered by individual good will leading to the collective creation of a motivational organizational culture, epitomized by reciprocity and solidarity and resulting in enhanced overall performance which is ultimately translated into

		lasting organizational excellence
24	Johnson, 2007, p.427	A means to provide meaning in one's life, to foster growth and development and to establish connectedness and community, thereby helping individuals see they are part of something bigger than themselves
25	Fawcett, 2008, p.421	Uses organization cultures to describe spirituality at work such that organization cultures should be people-centered and should take on a spirit that is inspiring instead of being limiting to be successful
26	Chamiec-Case, 2009, p.286	Defined spirituality as consisting of three functional categories: spirituality predispositions or catalysts, spirituality actions, behaviours or experiences and spirituality outcomes or consequences. In addition, she outlined an additional component of transcendence, ultimacy or divinity
27	Karakas, 2010, p.91	The journey to find a sustainable, authentic, meaningful, holistic and profound understanding of the existential self and its relationship and interconnectedness with the sacred and the transcendent

As seen from the above, the definition of the construct, spirituality at work, is indeed controversial and difficult to define. From observation, one could see that earlier definitions of the spirituality at work is more concerned with that of “transcendence” (seven out of the early 13 definitions from the handbook) and that of “ultimate” reality (four out of the early 13 definitions). It is also interesting that that earlier definitions generally do not move beyond the self. The concept of beyond the self to “others” and the “community” were later introduced into the



definition of spirituality at work in 1999/2000 by researchers such as Mitroff and Denton (1999) and Ashmos and Duchon (2000). For the first time, in 2005, organization excellence was brought into the definition of spirituality at work by Marques (2005). Interestingly, with the focus on others, community and organization excellence, “ultimate” as part of the definition slowly fell out of fashion after 2004. On the other hand, “transcendence” was still favoured, although used much lesser than before (five out of the later 14 definitions).

Many researchers have continued to work on the definitions to capture the essence of the construct and to try and define it succinctly.

One of such researchers is Sheep (2004) where he reviewed the workplace spirituality literature from 1994 to 2003 to see if there are any similarities in the various definitions. Based on his review, he proposed a conceptual convergence of workplace spirituality and found four recurring themes as the common dimensions:

*(a) Self-work integration*

This recurring theme refers to the personal desire to bring one’s whole being into the workplace, although individual preferences may vary. Self-work integration is consistent with the observation that people now put in more hours at work due to the competitive landscape and thus, would tend to seek or would desire to derive more out of their work since it now plays a more major role in people’s life today. Blustein (2006) pointed out that work is now a pervasive part of the lives of individuals and this trend is likely to grow in the coming years as the landscape of

working shifts rapidly and unexpectedly.

(b) *Meaning in work*

This recurring theme refers to the individual's desire to seek work that is perhaps purposeful and thus meaningful. In citing Ashmos and Duchon (2000), Sheep (2004) stated that spiritual beings express inner life needs by seeking meaningful work. This view is further supported by Mirvis (1997), where it was argued that the perception of the meaning of one's life and one's work must converge in order for spirituality growth and development. Meaning in work has also been used in later definitions of the construct (e.g. Dehler and Welsh, 2003; Johnson, 2007)

(c) *Transcendence of self*

This recurring theme refers to the connection to something beyond the self. Sheep (2004) cited Ashforth and Pratt (2003) where transcendence was described as a connection to something greater than oneself and that this connection can refer to many types, such as other people, causes, nature or the belief in a higher power. This view is further supported by Mirvis (1997) who referred to the company as a community built upon the transcendence of human differences.

(d) *Personal growth/ development of one's inner life at work*

This recurring theme refers to the interest of the self in continuously improving oneself, to be more knowledgeable and thus grow. Sheep (2004) referenced this theme to Maslow's hierarchy of needs. Maslow (1954) synthesized the research on human motivation and posited a hierarchy of human needs. Maslow identified five hierarchical levels of needs: First, physiological needs such as hunger, thirst,

bodily comforts; second, safety needs so as to avert from danger; third, love needs such as being able to affiliate with others and be accepted which involves both giving and receiving love; fourth, esteem needs, referring to the desire for a stable, firmly based high evaluation of oneself for self-respect or self-esteem and for the esteem of others and this includes two types of desires – for strength, achievement, adequacy, confidence, independence, freedom and for prestige or reputation; and finally, self-actualization needs that can be loosely summarized as “what a man can be, he must be” and is a term first coined by Kurt Goldstein in his reference to self-fulfillment as a higher order need of self-actualization. This theme of personal growth and development of one’s inner life at work falls under the fifth level of the Maslow hierarchy of needs such that individuals have a need to attain self-fulfillment and thus self-actualization through constant growth and development of one’s inner life at work. Based on the above four recurring theme, Sheep went on to developed the Workplace Spirituality Person-Organization Fit Scale.

Besides Sheep (2004), another researcher, Delgado (2005) also tried to find the common themes in the definition of spirituality at work by reviewing the extant literature. Delgado (2005) argued that the most common quality in descriptions of spirituality was transcendence, followed by meaning, mastery, animating or life-giving, connecting or unifying.

A dimension in Delgado’s (2005) study worth expanding on and of particular interest to this study is that of “connecting”. This dimension of connecting is interesting because it falls back on the universal need of humans to like feeling

connected and accepted by others living in the same community. This could actually be the motivating force for individuals to practice spirituality at work so that everyone can talk the same talk and help one another. In a book about new traditions in business by Renesch (1992), the author, pointed out that Brown, a contributor in a chapter, argued that a sense of community at work leads to greater employee satisfaction because our heart's desire is "to be part of a larger community of endeavour that is worthy of our best effort" (p.124) and Rosen, another contributor, noted that humanistic values are "the glue that binds healthy, successful employees with healthy, productive workplaces" (p.115).

Most recently, Karakas (2010) reviewed 140 papers on spirituality at work and concluded his definition of spirituality at work as the journey to find a sustainable, authentic, meaningful, holistic and profound understanding of the existential self and its relationship and interconnectedness with the sacred and the transcendent.

Besides the approach of reviewing the extant literature and finding a common theme, other researches such as Kinjerski and Shrypnek (2004) used the interviewing approach in their attempt to define spirituality at work. According to Hoyle, et. al (2002), the most important advantage of interviewing as the mode of measurement is the quality of information produced. Kinjerski and Shrypnek (2004) interviewed 14 professionals across Canada, US and England and of which, 12 individuals are experienced and responsible in consulting or facilitating spirit at work seminars. In fact, 11 of them write and publish on the topic of spirituality at work. The authors concluded eventually that they could not develop a clear definition based on participants' responses to explain, describe or define

the construct as participants' responses were that spirituality is too much integral in one's life to be defined and others, felt that the meaning will be destroyed if the construct were to be defined.

Based on the above discussion on the development of the definition of spirituality at work, it is evident that the field is still evolving. Many scholars have tried to build on, improve upon, find the commonalities of or even attempt to develop new definitions of spirituality at work. It is also observed that many scholars are increasingly starting to allude to pre-existing definition instead of re-inventing the wheels (e.g. Milliman, Czaplewski, and Ferguson (2003); Marques, 2010 p.382; Case and Gosling, 2010, p.263). These researchers alluded to Ashmos and Duchon's (2000) definition of spirituality at work. Others, such as Duchon and Plowman (2005) adapted the existing definition (i.e. Ashmos and Duchon's (2000) definition of spirituality at work) directly.

In my study, I have also chosen to adapt Ashmos and Duchon's (2000) definition of spirituality at work as the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of community instead of developing a new definition. This is in part because trying to find a new definition based on a literature review seems to be overly-done (e.g. Sheep, 2004; Delgado, 2005; Karakas, 2010). Thus, I hope not to repeat the efforts and would rather seek to adapt a definition that already reflects the nature of my research, covering inner life, meaningful work and a sense of community. Where the need arises later on, I may try to build on the definition. Ashmos and Duchon's (2000) definition is also well-established and has been cited more than

300 times since 2000. Also, many recent papers alluded to this definition as mentioned above. Further, Kinjerski and Shrypnok (2004) has shown that purporting to find a new definition may prove futile.

In the next section, I will go beyond the definitions of spirituality at work and outline the development of spirituality at work to further deepen our understanding.

### **2.3 Development of Spirituality at work**

Johnson (2007) felt that Mary Parker Follett (1868-1933), one of the pioneer management gurus, actually laid the foundations for Spirituality in the workplace because he felt that Follett's ideas almost a century ago anticipated current thought on spirituality at work and at times, even went beyond. Follett actually saw relating as the means to achieving spirituality in individuals, the workplace and in other realms of society. To her, relating is the principal means for constantly creating meaning in one's life, for constantly developing or creating oneself and for creating integrated lives (where people took their spirituality to work and for connecting with others and improving the larger community). Follett felt that it is through relating during ordinary days that a person creates a spiritual life and not through singular means such as meditation, imaging, etc.

An interesting view of spirituality at work is also that of holism. In the study of human development, three worldviews are widely accepted: First, the mechanistic view where the general goal is to predict future behaviour assuming that past behaviour is the best predictor of the future behaviour; second, the organismic

view where the focus is on the internal environment with the assumption that the fragments take meaning from each other and are interconnected; and third, the contextual view, grounded in the philosophy of relativism, where reality and truth is dependent on the external environment and thus, reality and truth change depending on the context (Haynes, 2009).

It was documented in Benner (1998) that the notion of spirit and soul actually went out of vogue in the 1900s and the resurgence of spirituality only happened in the post-modernism era as many began to look for some kind of moral or spiritual compass to reconstruct existence. It also happened as the intellectual movement shifted from the strict mechanist conceptions of reality towards a more organic and contextual view.

Yet, Haynes (2009) felt that instead of adopting the different viewpoints of mechanistic, organismic or contextual, a holistic approach and way of thinking would be superior since the “tenets of holism is that the whole is greater than the sum of its parts” (p.53). For example, considering spirituality at work will seem like a “waste of time and effort” (p.54) in the mechanistic viewpoint and validating the truth claims of spirituality and religion may be a struggle in the contextual viewpoint. Holism is defined as an inclusive, meaning-centered, experience-focused paradigm that emphasizes the intrinsic connectedness in life (Haynes, 2009, p.55) and points towards the existence of a transpersonal, supersensible context of all life (Miller, 1991, p. 54). Haynes (2009) went on to identify the four components of the holistic worldview as that of: mind, body, spirit and emotions. A holistic model of spirituality at work is critical because it

recognizes spirituality as an aspect of the human that endeavours to have a sense of meaning, purpose, and morality (Hong, 2011).

Spirituality at work is also found to address holistic learning and growth (Elliot and Trunbull, 2005) at a deeper level of human experience. Five dimensions of workplace spirituality were operationalized as follows: connection, compassion, mindfulness, meaningful work, transcendence. In the author's conclusion, based on data analysis, they reduced the five-factor model to a four-factor model where workplace spirituality was now defined as having compassion toward others, experiencing a mindful inner consciousness in the pursuit of meaningful work and that which enables transcendence. Petchsawang and Duchon (2009) felt that it is when people work with their hearts and spirits that they find meaning and purpose.

It is thus crucial for the workplace to acknowledge and stress the importance of engaging the whole person at work (e.g., Hall and Mirvis, 1996; Kahn, 1992) and not just be contented with a body and mind on the chair syndrome where employees leave their spirits at home! It is only when people bring their complete selves to work that their hearts, souls, creativity, talents and unique spirits can be unleashed.

To bring the discussion surrounding spirituality a step further, spirituality at work could perhaps lead to tangible performance outcomes. Karakas (2010) integrated three different perspectives to explain how spirituality may enable or lead to organizational performance: First, the Human Resources perspective where



spirituality enhances employee well-being and quality of life; second, philosophical perspective where spirituality provides employees with a sense of purpose and meaning at work; and finally, the interpersonal perspective where spirituality provides employees with a sense of interconnectedness and community. All these, according to the author, form an integrative view of how spirituality at work leads to tangible benefits.

## **2.4 Empirical studies on the outcome of spirituality at work**

In my review of the extant literature, I found that spirituality at work has been linked to a few performance outcomes, including but not limited to the following:

### *(a) Higher performance, productivity and profitability*

Organizations that encourage spirituality at work were found to improve their organizational performance, productivity and profitability (e.g. Neck and Milliman, 1994; Lloyd, 1990).

Ashmos and Duchon (2000), one of the most cited researchers of spirituality at work, reviewed the spiritual dimension of human beings and found that spiritual dimension is concerned with finding meaning and purpose and living in relation to others and to something bigger than oneself. The researchers recognized that the workplace is populated with people with a spirit and outlined three components of spirituality at work: first, inner life, referring to individuals who practice meditation, self-reflection, prayer, etc), secondly, meaningful work, where individuals experience joy and meaning in their work; and thirdly, community, where individuals experience personal growth as part of their work community

and that they feel valued, supported and trusted. Ashmos and Duchon then developed an instrument – Finding meaning and purpose at work with 66 questions to measure spirituality at work on the individual, work unit and organization level. They administered the questionnaire surveys in four hospital systems in four different cities within the United States and a total of 696 informants completed the questionnaire surveys. Factor analysis was performed and the results on the individual level were consistent with expectations that spirituality in the workplace involves inner life, community and meaningful work. Four other additional factors – blocks to spirituality, personal responsibility, positive connections with other individuals and contemplation – were found to enrich the concept. From the factor analysis of the responses by informants on the questions to be used as measures for the work unit and organization level, the researchers felt that these measures were not as compelling and somewhat disappointing because the construct spirituality at work could be too abstract and thus, difficult to comprehend, conceptualize and assess for the informants to complete as the focus shifts from what oneself would feel to having to characterize and project responses at the work unit and organization level.

Duchon and Plowman (2005) explored the relationship between spirituality at work and work unit performance. They adopted Ashmos and Duchon's (2000) definition of Spirituality at work and thereby measures spirituality at work using five measures of community, meaning at work, inner life, work unit community and work unit possessing meaning. The research was conducted in a large healthcare network in the Southwestern United States. The performance measures used were based on the network's existing measures of two types of patient

satisfaction: quality of care and sensitivity of staff providing the care. Results showed that the highest performing unit has higher spirituality scores than the lowest performing unit, except for the dimension of inner life, which appeared the same across all of the 6 units within the healthcare network.

Mitroff and Denton (1999) performed a two-year empirical study based on questionnaires and face-to-face interviews. Mitroff performed between 23-39 face-to-face interviews, depending on the particular questions asked and Denton performed 18 face-to-face interviews. They also mailed 131 questionnaires out and factor analysis performed on the 50 questions asked revealed that there is a sharp separation between parts of what Americans felt they can bring to work. Specifically, the participants felt that it was much more acceptable to bring their brains (cognition) to work than their feelings (affect). The researchers also found that spirituality at work, when present, allows employees to bring more of their creativity and intelligence to the workplace and such will improve organizational profitability.

Milliman, et al., (2003) sampled 200 MBA students in United States to investigate the relationship of workplace spirituality and employee work attitudes. They empirically linked five work attitudes: organization commitment, intention to quit, intrinsic work satisfaction, job involvement and organization-based self-esteem to other variables of interest to organizations, such as reduced turnover and absenteeism and improved creativity and job performance.

Fawcett (2008), as mentioned above, conducted a field study to assess company wide employee attitudes and job satisfaction at a leading financial services corporation. She found that spirituality at work can lead to a creative, inspiring and productive workforce through an ABC culture of: (a) Affirmation, which involves positive reinforcement that tells workers they make a difference and are valued; (b) Belonging, where people feel as if they are part of a larger organizational family; and (c) Competence where employees are able to perform their responsibilities at high levels.

Another interesting study was published by Buckingham and Coffman (1999) based on their write-up of two large Gallup surveys undertaken over a 25 year period, involving over 1 million employees and 80,000 managers. The Gallup survey consists of 12 questions such as “At work, do I have the opportunity to do what I do best everyday” and other learning and growing and making a difference questions. The survey is widely used in many companies in practice, including MNCs such as Standard Chartered Bank because the survey has been proven to correlate with higher levels of productivity, profit, employee retention and customer satisfaction. The Gallup survey is relevant for this study because the questions asked, although not directly pertaining to spirituality at work, is very much a proxy according to Poole (2009), which stated that “Maslow’s linkage between self-actualization and the transpersonal suggests that the Gallup 12 fits well with an understanding of spirituality as meaning-making” (p.581).

*(b) Organizational citizenship behaviour*

Sometimes, intelligence and on-the job performance and productivity alone is

insufficient for organizations to compete in the intensely competitive landscape of today's business environment. In fact, Tepper (2003) in quoting Katz and Kahn (1978), stated that "organization survival is dependent on, among other things, employee's willingness to perform behaviours akin to Organizational citizenship behaviours" (p.188). Organizations are thus constantly on the lookout for not only performance on the job but also, for work attitude and contribution beyond the individual's job description. The concept of organizational citizenship behaviour, thought of as the good soldier syndrome (Bateman and Organ, 1983), seems to be necessary.

Spirituality at work has been linked to organization citizenship behaviour in the extant literature. Nur and Organ (2006) conducted a study based on 328 employees of 26 business firms, of which 10 are management-by-virtues (i.e. where management philosophies and practices are based on virtues derived from religious beliefs) firms – Christians. They found that the management-by-virtues firms report higher incidence of organizational citizenship behaviour than the non management-by-virtues firm. Although this study is linked to religion, it is applicable to spirituality at work because according to Hawley (1993) and as mentioned earlier in this paper, "spirituality was the goal and religion is only the path" that leads to the goal (p.3). Thus, Nur and Organ's (2006) paper can be extended such that spirituality could perhaps lead to higher incidences of organizational citizenship behaviours.

Tan and Geh (2010) designed a questionnaire and solicited responses in Singapore, from individuals who have worked full time in their organization for at

least 6 months and found that in work organizations that embraces spirituality at work, individual employees will tend to develop high organization-based self-esteem (OBSE) and maintain favourable work attitudes and will engage in the performance of organizational citizenship behaviours. In fact, their study showed both a full and partial mediating effects of organizational-based self-esteem between spirituality at work and performance, measure by organization citizenship behavior (OCB).

### *(c) Creativity*

Increasingly, many researchers have found that creativity is an important competitive advantage such that creative employees can and will develop better solutions to deal with the issues that organizations face. As mentioned in part (a), examples of researchers whom have alluded to a link between spirituality at work and creativity are: Mitroff and Denton (1999), Milliman, et al., (2003) and Fawcett (2008). As seen in the introduction chapter, Neck and Milliman (1994) also discussed spirituality and innovation. Neck and Milliman (1994) proposed that thought self-leadership can empower employees with the skills to control and enhance their perceptions about work and thus gain more spirituality in their organizational life. They believed that spirituality can positively affect performance in part because spirituality can lead individuals to experience consciousness at a deeper level, thereby enhancing their intuitive abilities. The researchers argued that intuition can then facilitate employees to develop a more purposeful and compelling organizational vision, which can also increase innovation because many employees will become more creative when they feel that the organization offers them a genuine sense of purpose. Arguably,

organizations with a spiritual mission are also often able to attract and retain the most creative employees.

However, spirituality at work is not often empirically linked to innovation or creativity in the literature. Thus, this paper will fill the gap and contribute to the literature by performing an empirical study between spirituality at work and creativity.

In extending the link between spirituality at work to creativity, it is interesting to point out the link between creativity and performance. In Llyod's (1990) book, as quoted in Poole (2009), he argued that future organizations will have to be "nice" and also "imaginative, caring, sensitive and loving (p.225) such that not only will earnings per share ("EPS") increase (Llyod found that such "nice" companies' EPS is higher by 41%), there are "enormously rich source of creative energy and commitment that is available to companies when they rise above a pure profit motive" (p.208). Thus, since creative energy is important for the company, I hope to see whether spirituality at work is the source of creativity.

I will now move on from spirituality at work to introduce and discuss a new construct: work engagement.

## **2.5 Work engagement**

Kahn (1990) was amongst the first few scholars to conceptualize work engagement as a unique and important motivational concept. He described work engagement as the "harnessing of organization members' selves to their work

roles: in engagement, people employ and express themselves physically, cognitively, emotionally during role performances” (p.694).

From the perspective of Kahn, job engagement is best described as a multi-dimensional motivational concept reflecting the simultaneous investment of an individual’s physical, cognitive, and emotional energy in active and full work performance. Perhaps, engaged employees put in more effort into their work because they can identify with their work. According to Kahn (1990), a dynamic, dialectical relationship exists between the person who drives personal energies (physical, cognitive, emotional, and mental) into his or her work role on one hand, and the work role that allows this person to express him or herself on the other hand.

Kahn (1992) extended his research on work engagement later and postulated that engagement will produce positive outcomes at both the individual level, referring to personal growth and development, as well as at the organization level, in terms of performance quality.

Inspired by the work of Kahn (1990, 1992), Rothbard (2001) took a slightly different perspective and defined engagement as a two-dimensional motivational construct that includes attention and absorption. Attention refers to “the cognitive availability and the amount of time one spends thinking about a role” (p. 656) and absorption refers to “the intensity of one’s focus on a role” (p. 656). May, Gilson and Harter (2004), developed a 13-item scale to measure the three main



dimensions of Kahn's definition of engagement: cognitive, emotional and physical.

Rich, Lepine and Crawford (2010) also drew from Kahn's (1990) work to develop a theory that positions engagement as a key mechanism explaining relationships among a variety of individual characteristics (i.e. value congruence, organizational factors and job performance). The researchers quoted an article reporting results of theory-generating ethnographic research where Kahn formally defined engagement as "the simultaneous employment and expression of a person's 'preferred self' in task behaviours that promote connections to work and to others, personal presence (physical, cognitive, and emotional) and active, full performances" (p. 700). In their paper, Rich, Lepine and Crawford (2010) studied 245 firefighters and their supervisors employed by four municipalities and found that work engagement mediates the relationships between value congruence, perceived organizational support, and core self-evaluations and two job performance dimensions: task performance and organizational citizenship behavior.

Besides Kahn's school of thought and of course, later researcher's work following Kahn's work, there exist another view that linking work engagement to burnout.

It is interesting to note that for engagement, there too exists no agreement in the literature on the meaning of engagement (Bakker and Leiter, 2010 p. 13). In the handbook of essential theory and research on work engagement, the authors defined work engagement as a positive, fulfilling and affective-motivational state

of work-related well-being that can be seen as the antipode of job burnout (Bakker and Leiter, 2010 p. 1-2). Work engagement, according to the handbook, is deemed to carry far-reaching implications for employee's performance because the energy and focus inherent in work engagement allow employees to bring their full potential to the job, thereby enhancing the quality of their core work responsibilities. Further, it was stated that work engagement supports extra-role performance, which is a form of proactive approach beyond the formal structure of employee's position.

This view of work engagement as the antipode of job burnout is prolific in the extant literature (e.g. Maslach, Schaufeli and Leiter (2001); Maslach and Leiter, 1997; Schaufeli, Salanova, González-Romá, and Bakker, 2002). The association is a somewhat logical one since engaged employees are typically positive, energetic and views their work as challenging while burnout employees are typically negative, stressed and views their work as demanding. Maslach and Leiter (1997) assumes that burnout and engagement are two opposite poles of one continuum. Kahn, in his qualitative research paper on psychological presence of work (Kahn, 1992), views burnout as a situation that happens to individuals when they do not bring themselves to work and is a form of disassociation that occurs when individuals are exposed to psychologically unsafe situations that would expose them to the dangers of being drained with little in return. Kahn (1992) cited Maslach's 1982 work in his argument and stated that: "job burnout, which is defined in terms of depersonalization, that is, the absencing of the people's personal selves at work (Maslach, 1982)" (Kahn, 1992, pg.333). Thus, although Kahn did not go into details of burnout, by citing Maslach's word, he can be

viewed as agreeing with Maslach and thus, Kahn seems to be in the same camp as Maslach and Leiter who views burnout as the opposite of engagement and that it exist on the same continuum of engagement (i.e. burnout on one end and engagement on the other end).

Other researchers, on the other hand, such as Schaufeli (2002) felt that work engagement is an independent and distinct concept that is negatively related to burnout.

Maslach and Leiter (1997) characterized work engagement by energy, involvement and efficacy, which are the direct opposites of three burnout dimensions of exhaustion, cynicism and ineffectiveness. The authors argue that in the case of burnout, energy turns into exhaustion, involvement into cynicism and efficacy into ineffectiveness. Thus, by implication, engagement is assessed by the opposite pattern of scores on the three dimensions of the Maslach Burnout Inventory (Maslach, Jackson and Leiter, 1996).

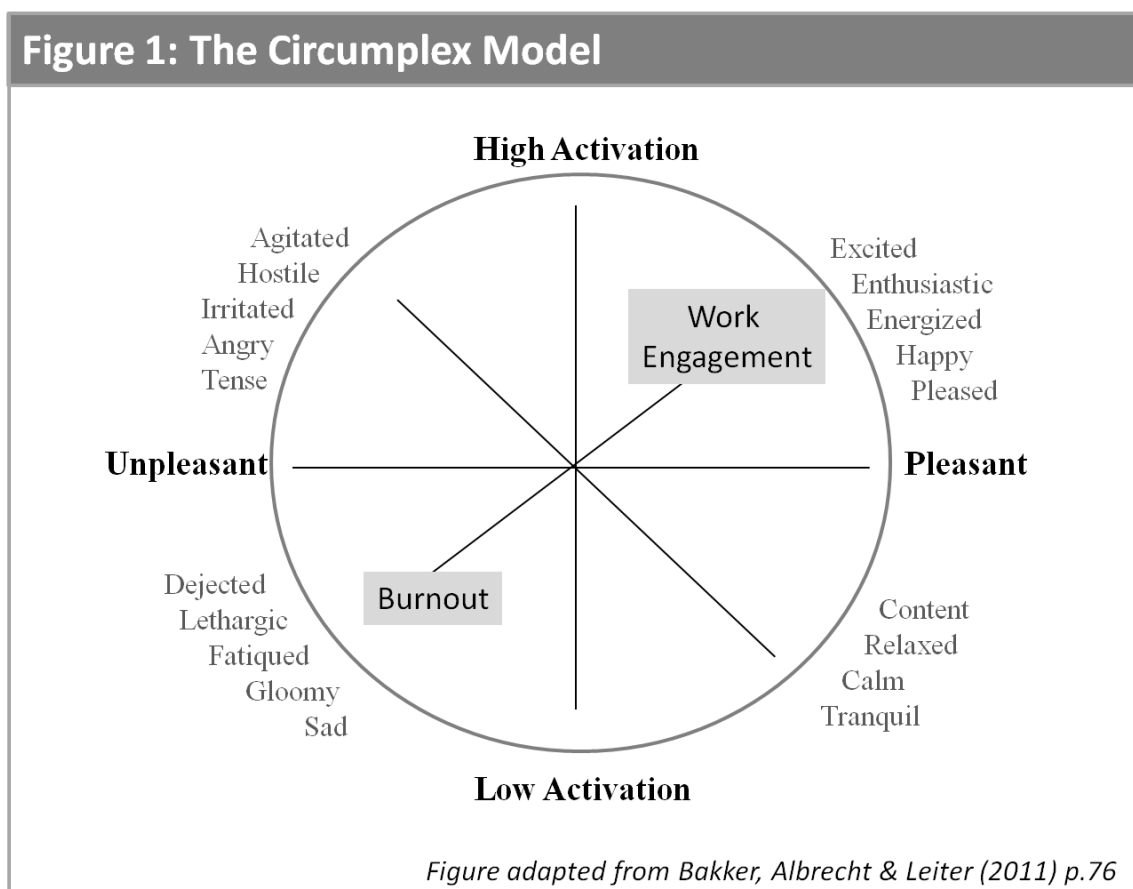
Although agreeing with the assertion that engagement is the positive antithesis of burnout, Schaufeli (2002) defined and operationalized work engagement in its own right as “a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption” (p.74). Vigour exists when there are high levels of energy and mental resilience while working, where employees are willing to invest effort in one’s work and will persist even in the face of difficulties. Dedication exists where one is strongly involved in one’s work and experiences a sense of significance, enthusiasm, inspiration, pride and challenge.

Absorption occurs when one is fully concentrated and happily engrossed in one's work and where time passes quickly and where one has difficulties with detaching oneself from work. Thus, in engagement, fulfillment exists in contrast to the voids of life that leave people feeling empty as in burnout.

Schaufeli and Bakker (2003), based on their definition of work engagement that includes vigour, dedication and absorption, further developed the Utrecht Work Engagement Scale ("UWES") to measure work engagement. This scale, according to Bakker and Leiter (2010), is now the most widely used engagement questionnaire (p.20). The UWES has also been validated in many countries including China and Finland (e.g. Yi-Wen and Yi-Qun, 2005; Hakanen, 2002). It was documented in Bakker (2009) that using the UWES, researchers have shown that engaged employees are highly energetic, self-efficacious individuals who exercise influence over events that affect their lives (Schaufeli, Bakker, Hoogduin, Schaap and Kladler (2001). Bakker (2009) further cited an example such that engaged employees would "change jobs once they were no longer challenged, and found meaning in other organizations or occupations" (p.4).

Not surprising, in this view linking work engagement with burnout, there exists many debates surrounding the placement issue. Is work engagement and burnout on the same continuum or are they really separate and distinct concepts? And these debates are not surprising because after all, according to Bakker et al., (2011), the rationale and dimensionality of work engagement was, in part, derived from the study of burnout which refers to the incapability to work (exhaustion) and the unwillingness to work (cynicism and disengagement).

In his recent paper, Bakker et al., (2011) attempted to reconcile this issue (i.e. are work engagement and burnout along the same continuum or are they distinct concepts?). Interesting, they positioned work engagement in Russell's (1980, 2003) circumplex model of affective well-being instead of addressing the issue directly. The circumplex model is reproduced below in Figure 1.



According to Russell (1980, 2003), affective states arise from two fundamental neuro-physiological systems. One is related to a pleasure–displeasure continuum and the other is related to arousal, activation, or alertness. The two emotions can be understood as a linear combination of these two dimensions as varying degrees of both pleasure and activation. Accordingly, based on the circumplex model,

emotions are not viewed as discrete and isolated but rather, are inter-related based on the two dimensions of pleasure and activation.

As cited in Bakker et al., (2011), another paper Bakker and Oerlemans (in press), actually managed to position work engagement in the upper right-hand side of the circumplex model, resembling high levels of pleasure and activation while burnout is positioned in the lower left-hand side, with low levels of pleasure and activation. While burnout individuals are exhausted and cynical about work, engaged employees are full of energy and enthusiasm.

While the question of whether work engagement and burnout is along the same continuum or distinct constructs, was not directly answered, the positioning of both constructs (i.e. work engagement and burnout) within the circumplex model and opposite of each other, have, perhaps placed both constructs together. This is because a very general sense, a circumplex is actually a two-dimensional model that describes expected relationships among a number of variables (Guttman, 1954). The relationship among the variables is said to be circular and implies an ordering of variables that is without beginning or end, in which similar variables are closer to one another on the circle, variables that are semantic or behavioral opposites are located directly across the circle (i.e., through the origin) and variables that are unrelated or orthogonal are separated by angles of ninety degrees.

Interestingly, burnout and engagement is located directly across the circle through the origin and thus, the circumplex model may have implicitly suggested that the

two constructs are behavioural opposites on the same continuum instead of being separate and distinct constructs.

Another model representing the motivational process of work engagement is the Job Demands-Resources (JD-R) model. According to Bakker and Demerouti (2007), the JD-R model assumes that job resources have the motivational potential and actually leads to high work engagement and excellent performance. Job resources, along with job demands are the two broad categories of job characteristics as explained below:

(a) Job resources, according to Schaufeli and Bakker (2004), refer to those physical, psychological, social or organizational aspects of work that: first, reduce the health-impairing impact of job demands; second, are functional to help individuals in achieving work goals; and third, can stimulate personal growth, development and learning. Examples of job resources as provided by the same authors are opportunities for skill utilization, supervisor support, financial rewards and career opportunities; and

(b) Job demands refer to those aspects of work including the physical, psychological, social or organizational aspects that requires sustained physical or psychological (cognitive and emotional) effort or skills, which tax employees' personal capacities and are thus associated with certain psychological and/or physiological costs (Bakker, Demerouti, Schaufeli, 2003; Bakker and Demerouti, 2007). According to Bakker, et al. (2003), examples of job demands are task interruptions, workload, work-home interference, organizational changes and

emotional dissonance.

The central assumption in the JD-R model is that job strain develops when certain job demands are high and when certain job resources are limited. In contrast, when job resources are high, work engagement follows. This is because job resources can play both an intrinsic and extrinsic motivational role that lead to high work engagement (Bakker and Demerouti, 2008). Job resources perform an intrinsic motivational role as they foster employees' growth, learning and development. Job resources can also fulfill basic human needs (Deci and Ryan, 1985). On the other hand, job resources are extrinsically motivational because they are instrumental in enabling one to achieve work goals. In Van Den Broeck's (2008) paper, they also postulated that job resources relate positively to employees' engagement through a motivational process. This is consistent with the effort-recovery model (Meijman and Mulder, 1998) where work environment that offers many resources actually fosters the employees' willingness to dedicate their efforts and abilities to the work tasks.

In line with the above, some studies have shown that job resources are positively related to work engagement. Schaufeli and Bakker (2004) found that among four different samples of Dutch employees, there exist a positive relationship between three job resources – performance feedback, social support and supervisory coaching – and work engagement (measured by vigour, dedication and absorption). These findings, based on structural equation modelling analyses, showed that job resources (not job demands) exclusively predicted engagement. In Schaufeli's (2009) study of 201 managers and executives of a Dutch telecom



company, he found that changes in job resources were predictive of engagement over a period of one year.

The JD-R model is further extended in recent years to include personal resources. A couple of studies have suggested that job resources do foster the development of personal resources too. For example, Xanthopoulou, Bakker, Demerouti, Schaufeli, Taris, Schreurs (2006), employed a structural equation modelling analyses and showed that personal resources partly mediated the relationship between job resources (self-efficacy, organizational-based self-esteem and optimism) and job engagement. In this study, the JD-R model can thus be used as a conceptual basis supporting the possibility that spirituality at work is also a type of job or personal resource that can lead to work engagement.

Spirituality at work, when viewed as a resource, can also provide both intrinsic (i.e. personal growth and development) and extrinsic (i.e. in meeting and achieving work goals) motivation to enhance work engagement. This is in line with the self-determination theory, which is an approach to human motivation and personality. The self-determination theory investigates humans' innate psychological needs and inherent growth tendencies that are the basis for their self-motivation and personality integration (Ryan and Deci, 2000). Ryan and Deci (2000) highlighted that motivation concerns the elements of energy, direction, persistence and equi-finality and these elements are all aspects of activation and intention. Motivation is thus perennial and highly sought after due to its consequences – motivation produces. In the extant literature on self-determination theory, the concept of needs have been partially credited to Maslow's hierarchy of

needs (Van den Broeck, Vansteenkiste, Witte, Lens, 2008).

Hackman and Oldham (1976), based on their model of conditions that would lead individuals to become internally motivated to perform effectively on their jobs, found a positive causal link between core job dimensions, critical psychological states and personal and work outcomes. Essentially, they believe that the task itself holds the key to employee motivation such that monotonous job stifles motivation to perform well while challenging job, on the other hand, enhances motivation. They tested their model on 658 employees occupying 62 different jobs across 7 organizations. Core job dimensions included skill variety, task identity, task significance, autonomy and feedback. The critical psychological states are experienced meaningfulness of the work, experienced responsibility for work outcomes and knowledge of work results. Finally, the personal and work outcomes are high internal work motivation, high quality work performance, high work satisfaction and low absenteeism and turnover. Further, an individual's motivation will be affected by their "growth need strength" (p.254), thus consistent with the concept of needs by Maslow's model too. Indeed, the causal importance of "experienced meaningfulness" leading to "high internal work motivation" and "high quality work performance" is of particular relevance in this study because meaningfulness is one of the dimensions of spirituality at work.

Further, as referred to in Christian, Garza, Slaughter (2011) work roles actually represent opportunities for individuals to apply themselves behaviorally, energetically, and expressively, in a holistic and simultaneous fashion (Kahn, 1992; Rich et al., 2010). Thus, work engagement is viewed fundamentally as a

motivational concept that represents the active allocation of personal resources toward the tasks associated with a work role (Rich. et al., 2010).

Other than the self-determination theory, the conservation of resources (“COR”) model advocated by Hobfoll (2001) also supports why spirituality at work, when viewed as a resource, can lead to work engagement. The conservation of resources model centers on the idea of resources, defined as “those objects, personal characteristics, conditions or energies that are valued by the individual or that serve as a means for attainment of these objects” (Hobfoll, 1989, p.516). Thus, people will try and seek to obtain, build and protect the resources that they value because the potential or actual loss of resources after significant investment on their part would lead to psychological stress. Resources can be objects such as a home, personal characteristics such as a positive outlook, energies such as available time or knowledge and conditions such as a happy marriage or financial stability. Thus, once an individual obtains financial stability, for example, they will seek to protect them. Where resources are missing, such as knowledge, individuals will also seek to obtain or build them.

There are two important principles behind the conservation of resources model: First, resource loss is disproportionately more salient than resource gain. Thus, losing financial stability, for example is more painful than achieving financial stability if one have already achieved financial stability in the first place. Secondly, people must invest resources in order to protect against resource loss, recover from losses, and gain resource. There is no free meal in this world and in line with a business owner, they must invest resources such as time and money

before they can gain more profits or money.

In a recent paper, mentioned above but worth repeating here again, Bakker et al., (2011) applied the circumplex model to the JD-R model and viewed high job demands as “activation” and high job resources as “pleasure” in the circumplex model. Both job demands and job resources have been found to predict work engagement. In fact, the researchers went on to conclude that “the exact opposite pattern of relationships has been found for burnout. Risk of burnout is most likely when high job demands are combined with low job resources” (p.77) and that “it follows that burnout (displeasure and deactivation) is most likely when such a situation is prolonged for a longer time period” (p.77).

Despite the above findings, researchers such as Schaufeli and Salanova (2011) and Sonnentag (2011), on the other hand, are of the view that not feeling burnout does not mean that one feels engaged and I agree with their views. This is because one can actually feel disengaged but not burnout. For example, an employee may not like his or her work and thus find it difficult to feel energized by work and this is not because the employee has overworked or is exhausted and thus resulting in burnout. It just means that the employee is not engaged to his or her work. Even Bakker et al. (2011) concluded that although engagement and burnout are different but closely related features of one phenomenon – work-related well-being, they agree with Schaufeli and Salanova’s (2011) views that it is a good idea to maintain a critical examination of both engagement and burnout measures separately for conceptual and empirical reasons. While this was the stand, Bakker et al. (2011) also confirmed that whilst it is a good idea to use both the positive

(i.e. work engagement) and negative (i.e. burnout) sides of the coin if one wants to measure employee well-being, the positive items on their own can be effective to assess the extent to which employees feel enthusiastic, energized, and motivated because their jobs are both “active” and “pleasurable”, per the circumplex model.

## **2.6 Empirical studies on the outcome of work engagement**

The literature on work engagement tends to portray work engagement as a win–win situation for both the employees and the organizations. Work engagement is argued to have strong effects on performance outcomes because work engagement captures both the “can do” and “will do” dimensions (Bakker and Leiter, 2010). The following highlights some common performance outcomes linked to work engagement:

### *(a) Performance and financial returns*

Based on the JD-R model, researchers such as Salanova et al. (2005) and Xanthopoulou et al. (2009) found that work engagement leads to performance. Salanova et al., (2005) used a sample of 120 work units from 60 hotel front desks and 60 restaurants to examine the mediating relationship of service climate in the prediction of employee performance and customer loyalty. In their study, organizational resources are reflected by organizational training, job autonomy and technology. Work engagement was assessed using the work engagement scale made up of vigor, dedication and absorption while employee performance is accessed by the empathy and excellent job performance scales. Results showed that organizational resources and work engagement predict service climate, which

in turn predicts employee performance and customer loyalty.

Xanthopoulou et al. (2009) conducted a survey with 42 employees working in three Greek fast-food branches to investigate how job resources measured by autonomy, coaching and team climate relates to the personal resources of self-efficacy, self-esteem and optimism. Multi-level analysis was performed and results showed that day-level job resources had an effect on work engagement through day-level personal resources and that day-level coaching, in particular, had a direct positive relationship with day-level work engagement, which also predicted daily financial returns.

Another instrument for measuring work engagement, as highlighted in the Work Engagement handbook by Bakker and Leiter (2010) is the Gallop 12 or “Q12”. Q12 has been introduced in the discussion of spirituality at work and has been linked to performance outcomes including productivity, profit, employee retention and customer satisfaction. It is very interesting that this survey is once again, mentioned as a measurement for work engagement. The contributors to the handbook, Schaufeli and Bakker, pointed out that the Q12 taps into the employee’s perceived job resources (Bakker and Leiter, 2010, p.15). Interestingly, the researchers further stated that the Q12 actually assesses the perceived level of resources in the employee’s job and not engagement (contrary to what it is commonly used for). Despite this, it was pointed out that the Q12 employee engagement concept is virtually identical to overall job satisfaction and thus sometimes also known as “employee satisfaction-engagement” (Harter, Schmidt, and Hayes, 2002). In fact, Schaufeli and Bakker added the types of resources to

the Q12 and of particular relevance to us are those that are in line with the dimensions of spirituality at work. For example, “meaningfulness” is a resource identified with the question “does the mission/purpose of your company make you feel your job is important”. This question, in my opinion, also shows an alignment with organizational values. Also, “social support” is marked as a resource for the question of “do you have best friend at work”. Thus, it does show that some dimensions of spirituality at work are indeed resources that can lead to work satisfaction/engagement, which would lead to productivity, profit, employee retention and customer satisfaction.

*(b) In-role and extra-role performance*

Performance can be commonly divided into in-role and extra-role dimensions. The former refers to those officially desired outcomes of behaviours that directly serve the goals of the organization whereas the latter are discretionary behaviours on the part of an employee that promote the effective functioning of an organization. (Bakker and Leiter, 2010).

The roots to the distinction between intra-role and extra-role behaviours can be traced back to the works of Katz and Kahn in 1966: *The social psychology of organizations*. According to Bateman and Organ (1983), in citing Katz and Kahn’s work, citizenship, supra-role or extra-role behaviour were referred to as gestures that lubricates the social machinery of an organization but does not inhere directly to task performance and are acts that cannot be prescribed in given work, except to some minimally acceptable or enforceable standards and managers are believed to value such behaviours. Organizations seemed to desire citizenship behaviours

and view such employees as “good soldiers”.

Christian et al. (2011) performed an extensive search and shortlisted over 200 published and over 30 unpublished articles from main databases between the period of 1990 to April of 2010. They found that engagement was positively related to task performance and contextual performance. Task performance, is similar to in-role performance while contextual performance is similar to extra-role behaviour or organizational citizenship behaviour. The researchers quoted Borman and Motowidlo's (1997) definition of task performance as “the effectiveness with which job incumbents perform activities that contribute to the organization's technical core” (p. 99). Contextual performance, on the other hand, was defined as performance that is not formally required as part of the job but that helps shape the social and psychological context of the organization (Borman and Motowidlo, 1993). An important contribution of Christian et al. (2011) is that it is “at odds with the belief that engagement is predominantly associated with extra-role behaviours (e.g. Macey and Schneider, 2008). This is explained by Christain et al. (2011) that engaged employees experience a high level of connectivity with their work tasks and they thus strive towards task-related goals that are intertwined with their in-role definitions and scripts, leading to high levels of task performance.

Bakker et al. (2004) used the JD-R model to investigate the relationship between job characteristics of demand and resources, burnout and performance. They found that job resources were the most crucial predictors of disengagement (i.e. withdrawal from work) and disengagement, in turn, was a strong predictor of



organizational citizenship performance. The researchers also quoted Munene (1995) who found that job involvement, a motivational variable that is close to the researcher's engagement measure, was positively related to organizational citizenship behavior. In their paper, Bakker et al. (2004) concluded that the JD-R model suggests that extra-role performance is also "a reflection of the organizational environment but more specifically a reflection of the available resources, and, once again, resources imply such job characteristics like autonomy, social support, and possibilities for self-growth" (p.97) and that "when employees notice that they have resources available and are not presently overwhelmed by job demands, they, in exchange for those resources, tend to engage in pro-organizational actions" (p.97).

As discussed in Bakker and Demerouti's (2008) paper, Bakker, Gierveld and Van Rijswijk (2006) conducted a study on work engagement and performance among 105 school principals and 232 teachers and demonstrated that engaged principals scored higher on intra-role and extra-role performance. There are significant and positive associations between school principals' work engagement scores and teacher-ratings of school principals' performance and leadership. More specifically, results of structural equation modeling showed that engaged principals scored higher on in-role and extra-role performance. Also, engagement was strongly related to creativity; the higher school principals' levels of work engagement, the better they were able to come up with a variety of ways to deal with work-related problems. Finally, engaged school principals were seen as transformational leaders – being able to inspire, stimulate and coach their co-workers.

Engelbrecht (2006) performed a qualitative research among Danish midwives and through interviews, found that an engaged midwife is a person who radiates energy and keeps up the spirit at the ward, especially in situations where work morale is low and frustration spreads. An engaged midwife is ready to do whatever needs to be done, and is seen as a source of inspiration for herself and others. She has a positive attitude towards her work and is happy for the things she is doing. The love (for her job) is expressed through the passion with which she fulfils her daily tasks. In addition to the normal tasks of a midwife, she is also engaged in other job-related but voluntary activities at the ward. (p. 154).

#### *(c) Creativity*

Creativity is a valued commodity in every kind of human endeavour (Gough, 1979). Many organizational scholars have contended that creativity is critically important to the success of both individual workers and organizations (e.g. Clark and Cropanzano, 1999 in (James, Brodersen, and Eisenberg, 2004). In fact, engagement was found to be strongly related to creativity (Bakker and Demerouti, 2008) because engaged employees are more willing to solve organizational problems and will employ their creativity to do so. In Bakker and Demerouti's (2008) paper, they outlined four reasons why engaged workers perform better (i.e. due to positive emotions, good health, ability to mobilize resources and ability to create own resources). Of most relevance to this study is the first reason of engaged workers having positive emotions. As documented in the same paper, the broaden-and-build theory of positive emotions (Fredrickson, 2001) states that certain positive emotions including joy, interest and contentment, all share the capacity to broaden people's momentary thought – action repertoires and build

their personal resources (ranging from physical and intellectual resources to social and psychological) through widening the array of thoughts and actions that come to mind. For instance, joy broadens resources by creating the urge to play and be creative (p.216). Creativity is part of the integrative model of engagement where creativity was a performance outcome (p.218).

Bakker and Leiter (2010) cited Schaufeli et al.'s (2006) research on workaholism, where a cross-sectional study was conducted among a large set of Dutch employees, and noted that “engaged workers reported higher levels of in- and extra-role behaviour and innovativeness than unengaged workers” (p.48) whereas workaholism was not.

In a complementary though distinct concept of thriving versus engagement, it was also found that thriving is positively associated with creative and innovative behaviour (Carmeli and Spreitzer, 2008).

## **2.7 The relationship between spirituality at work and work engagement**

This chapter theoretically reviewed the research on both the constructs: spirituality at work and work engagement that are of interest to this study. The empirical linkages of both constructs with key performance outcomes such as organization citizenship behaviour and creativity were also examined.

Another observation is that spirituality at work seems to be the pre-requisite to work engagement. This is because when individuals feel engaged, they would be absorbed with work. However, one can only really be absorbed in work and thus

feel to be in control (i.e. physical engagement), that they can fulfill their psychological needs and values (i.e. emotional engagement) and to feel a sense of identity (i.e. cognitive engagement) after they have first achieved spirituality at work. In line with this argument, some dimensions of spirituality such as meaningful work does indeed makes an individual feel a greater sense of purpose, identity and helps fulfil some aspects of psychological needs. Another example would be the alignment with organization values such that when individuals feel that their values are consistent with that of the organization's values, they too will feel a great sense of identity and perhaps, be in control too. This observation is an important one because in the literature, spirituality at work has never been mentioned as a resource that could lead to work engagement. In the work engagement literature, resources typically refer to resources such as opportunities for skill utilization, supervisor support, financial rewards, etc. Thus, one can perhaps view spirituality as a resource within the JD-R model.

Spirituality at work also leads to a number of performance outcomes (i.e. higher performance, productivity and profitability, organizational citizenship behaviour and creativity) that are very similar to the outcomes resulting from work engagement (i.e. performance and financial returns, in-role and extra-role performance and creativity). Thus, with this parallel in performance outcomes and having observed that spirituality is a resource, it seems plausible to conclude that spirituality is an antecedent to work engagement that leads to desired performance outcomes as above.

As pointed out earlier in this chapter, there appears to have a gap such that empirical studies on the outcome of spirituality at work for creativity are not as robust as that of work engagement. The extant literature on spirituality at work tends to just allude to creativity as an outcome. Thus, a contribution to existing literature would be to follow up and quantify creativity as an outcome dimension of spirituality at work.

In the next chapter, I will develop a theoretical model for this study.

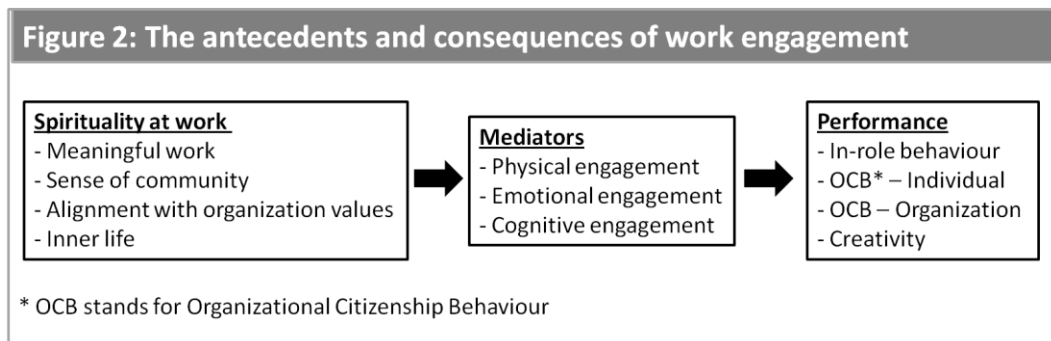
## **Chapter 3: Theoretical Model**

### **3.1 The theoretical measurement model**

This study seeks to investigate the mediating effects of work engagement between spirituality at work and performance.

Following an extensive literature review, this study will assess the relationship between spirituality at work, work engagement and performance by proposing a measurement model: The antecedents and consequences of work engagement.

Figure 2: The antecedents and consequences of work engagement below shows the theoretical measurement model of this study and proposes a positive correlation between spirituality at work and performance through the mediating effects of work engagement.



### **3.2 Spirituality at work**

In this model, the antecedent of work engagement is spirituality at work, made up of four dimensions. I will rely on a well-established definition of spirituality at work to be the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of community (Ashmos and Duchon, 2000). Following this definition, spirituality at work will

therefore logically comprise of three dimensions: Meaningful work, sense of community and inner life.

Milliman, et al. (2003) adapted Ashmos and Duchon's (2000) definition but used the dimensions of meaningful work, sense of community and alignment with organization values. In Milliman et al.'s paper, they included the dimension of alignment with organization values but excluded the element of inner life. The researchers seemed to view inner life as a subset of meaningful work because in their discussion of meaningful life, it was mentioned that "spirituality view is that work is not just meant to be interesting or challenging, but that it is about things such as searching for deeper meaning and purpose, living one's dream, expressing one's *inner life* needs by seeking meaningful work, and contributing to others" (p.429).

However, in Ashmo and Duchon's (2000) paper, inner life was a distinct dimension from meaningful work and thus, I felt that I should include inner life as the fourth dimension of spirituality at work in my study. This is in addition to Milliman, et al.'s (2003) dimensions of spirituality at work of meaningful work, sense of community and alignment with organization values. I agree with Milliman, et al.'s approach of including the dimension of alignment with organization values because researchers such as Tepper (2003) have found that psychological states that leads to spirituality at work (i.e. gratefulness, sensitivity to others' needs and tolerance for inequality), are more likely to produce organization citizenship behaviours (one of the performance outcomes that this study is interested in) when the organization's values and the individual's values

are consistent.

Thus, this study will be based on four dimensions of spirituality at work:

(a) Meaningful work is the search for deeper meaning and purpose, living one's dream and expressing one's inner life needs and contributing to others;

(b) Sense of community is having a deep connection to, or relationship with others;

(c) Alignment with organizational values is where individuals experience a strong sense of alignment between their personal values and that of their organization's mission and purpose; and

(d) Inner life is where life captures the feelings of hopefulness, awareness of personal values and concern for spirituality.

I hope to that these four dimensions would represent the spirituality at work construct. Spirituality at work, according to Ashmos and Duchon (2000), is also about finding an opportunity at work to express many aspects of one's being, not merely the ability to perform physical or intellectual tasks and that understanding spirituality at work begins with acknowledging that people have both an inner and outer life such that nourishment of the inner life can lead to a more meaningful and productive outer life. Thus, the four dimensions of spirituality at work can hopefully illuminate on the respective relationship with the productive outer life



that will be addressed later in this study.

### **3.3 Work engagement as the mediator**

Work engagement is the mediator in this study's measurement model in my study. By introducing work engagement as the mediator, this study hopes to derive insights of the relationships between spirituality at work, work engagement and performance. There is a dearth of literature linking constructs such as meaningfulness with work engagement (e.g. May et al., 2004) and constructs such as value congruence to performance using work engagement as the mediator (e.g. Rich et al., 2010). Meaningfulness and value congruence are closely related to some dimensions of spirituality at work. Hence, it would be interesting to examine how spirituality at work could enhance work engagement and in turn, lead to performance.

For work engagement, I will rely on Kahn's (1990) conceptualization of work engagement as the harnessing of organization members' full selves to their work roles where in engagement, people employ and express themselves physically, emotionally or cognitively during role performances. This definition of work engagement is chosen because it is in line with the concept of spirituality at work, where the whole person is involved. In fact, when Kahn conceptualized work engagement, he attributed it to the concept of harnessing an employee's **full self** in terms of physical, emotional and cognitive dimensions. Thus, work engagement in the measurement model will comprise of three dimensions: Physical engagement, emotional engagement and cognitive engagement as follows:

(a) Physical engagement, according to Brown and Leigh (1996) as cited in Rich et. al., (2010), is defined as the “energy exerted per unit of time” (p. 362). In this level of engagement, the self can be viewed in terms of physical energies focused or expended on specific task activities, allowing the individual to feel competent and be able to maintain autonomy and control over different courses of action.

(b) Emotional engagement refers to the emotional reactions associated with the human desire to fulfill subjective psychological needs or values (Rich et. al., 2010). It usually concerns affect and emotional states.

(c) Cognitive engagement are energy that can be allocated in various work and non-work domains according to the identities that individuals define for themselves, in reference to the roles they hold (Rich et. al., 2010). It is usually concerned with the perception of oneself.

I have chosen to adopt Kahn’s three main dimensions of engagement because when Kahn conceptualized work engagement, he attributed it to the concept of harnessing an employee’s full self in terms of physical, emotional and cognitive dimensions. In fact, Kahn (1992) further posited the concept of psychological presence, manifested as personally engaged behaviours – i.e. what it means to be fully present as a person occupying a particular organizational role, such that one’s thoughts, feelings and beliefs are accessible within the context of role performances. Four dimensions of psychological presence outlined are as follows: “people feel and are attentive, connected, integrated and focused in their role performances” (p.322). These dimensions collectively, in Kahn’s view, define

what it means for people to be “alive, *there* in the fullest sense, accessible in the given work role” (p.322). This results in a personal accessibility to work, in terms of contributing ideas and effort, to others (in terms of being open and empathetic) and to one’s self (in terms of growth and learning).

The above are arguably connected to the concept of spirituality at work, where the recurring themes of spirituality outlined were that of: self-work integration, meaning in work, transcendence of self and personal growth/ development of one’s inner life at work and also, with the definition of spirituality at work, which, to re-iterate, is the recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place in the context of community.

Kahn’s concept of an engaged person, bringing one’s full self to work is akin to spirituality’s dimension of self-work integration, where a person desires to bring one’s whole being into the workplace. Also, the three results of Kahn’s work engagement are also similar to spirituality at work as follows: first, contributing to work can be obtained where individuals find meaning at work and thus desire to seek meaningful work and contribute. Secondly, accessibility to others occurs when there is a sense of community, in accordance with Ashmos and Duchon’s (2000) and thirdly, to one’s self in terms of growth and learning is exactly the same with the need to of spirited employees to achieve personal growth and develop one’s inner life at work.

Thus, with consideration given to the factors above, this study will rely on Kahn’s definition of work engagement as: The harnessing of organization members’

selves to their work roles where people employ and express themselves physically, cognitively and emotionally during role performances.

The use of mediators in explaining the relationship between spirituality at work and performance is not new (e.g. Tan and Geh, 2010). Other researchers have used work engagement as a mediator including Salanova and Schaufeli (2008), where they investigated the mediating role of work engagement among job resources (i.e. job control, feedback and task variety) and proactive behavior at work. Results suggested that a significant positive path coefficient links job resources and proactive behavior with work engagement, and work engagement fully mediates the relationship between job resources and proactive behavior. Thus, one can view spirituality at work as a resource and proactive behaviour as a similar construct as that of OCB and it thus seems like work engagement is a convincing mediator.

Yet some other researchers use mediator, although not work engagement, but related concepts to work engagement such as organizational based self esteem (OBSE) as a mediator. Tan and Geh (2010) found both full and partial mediating effects of OBSE between spirituality at work and in the performance of organizational citizenship behaviours (OCB). OBSE is the degree to which organizational members believe that they can satisfy their needs by participating in roles within the context of the organization (Pierce, Gardner and Cummings, 1989).

OBSE is connected to, although it is a conceptually distinct construct to the

concept of engagement. OBSE is similar because and especially so in cognitive engagement where employees will perceive themselves positively and thus engage in work behaviours such as OCB. In the literature, OBSE have been shown to lead to work engagement. As cited in Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009), in a longitudinal study among Finnish healthcare personnel, OBSE turned out to be one of the most important predictors of work engagement measured two years later (Mauno, Kinnunen and Ruokolainen, 2007). Thus, OBSE and work engagement are conceptually distinct constructs but they correlate with each other.

Work engagement is postulated to be the mediator in this study also because the outcome of spirituality at work, based on the literature, is very similar and sometimes even identical to the outcomes of work engagement. For example, OCB is a performance outcome in spirituality at work and also in work engagement.

In deciding and supporting the use of work engagement as the mediator in this study (instead of using other mediators such as OBSE), the JD-R model, conservation of resources model and self-determination theory comes into picture.

In the JD-R model, job resources are found to motivate employees and leads to high work engagement and excellent performance. In applying the JD-R model to this study, spirituality at work is viewed to have a nourishing effect on individuals and can thus be considered as a type of resource. Halbesleben (2006) pointed out a number of potential resources including social support, which is similar to some

dimensions of spirituality at work such as sense of community and meaningful work. By having spirituality at work, employees will be perhaps be more supported and can better achieve their work goals due to higher motivation, thereby stimulating employees' personal growth, development and learning. This is consistent with the self-determination theory where humans' innate psychological needs and inherent growth tendencies are the basis for their self-motivation and personality integration.

Bakker and Leiter (2010) provided examples of other resources such as autonomy and involvement in decision making and stated that resources are highly prized because they help individuals cope with job demands such as daily hassles and role stress. Thus, work engagement could explain why spirituality at work could lead to performance since with spirituality at work, individuals can gain a valuable resource to make them more effective, seek growth, cope better with stress and could thus perform better.

Thus, where spirituality at work is now viewed as a resource, it is arguably true then that where spirituality at work exists, individuals would be motivated both intrinsically and extrinsically and that with spirituality at work, if it were to be assumed that individuals have already achieved better conditions, it is expected that one would thus seek to work harder to protect or retain it – manifested in both in-role behaviours and extra-role behaviours. One might also try to be as creative as possible to protect this resource – spirituality at work. Alternatively, one might want to invest time in learning spirituality at work so that this resource of spirituality at work can be gained.

Empirically, May, et al., (2004) explored the determinants and mediating effects of three psychological conditions, namely, meaningfulness, safety and availability on employees' work engagement. Using a 13 items scale developed to represent the three components of Kahn's (1990) psychological engagement: cognitive, emotional and physical engagement. Meaningfulness refers to the value of a work goal or purpose, judged in relation to an individual's own ideals or standards (Hackman and Oldham, 1980; May, 2003; Renn and Vandenberg, 1995) and reflected by job enrichment, work role fit and co-worker relations. Psychological safety refers to the "feeling of being able to show and employ one's self without fear of negative consequences to self-image, status, or career" (Kahn, 1990, p. 708) and this is reflected by supervisor relations, co-worker relations and co-worker norms. Psychological availability is defined as an individual's belief that the individual has the physical, emotional or cognitive resources to engage the self at work (Kahn, 1990) and is reflected by resources, work role security and outside activities.

Results of this study revealed that all three psychological conditions exhibited significant positive relations with engagement, among which meaningfulness displayed the strongest relation. Job enrichment and work role fit were positively linked to psychological meaningfulness. Rewarding co-worker and supportive supervisor relations were positively associated with psychological safety, whereas adherence to co-worker norms and public self-consciousness were negatively associated. Psychological availability was positively related to resources availability and negatively related to participation in outside activities.

This study is interesting and relevant because it inspired me to draw parallel between the dimensions used above and that of spirituality at work. For example, meaningfulness alludes to meaningful work and sense of community alludes to supervisor and co-worker relations. Also, May et al.'s, (2004) paper showed that having resources will allow employees to be engaged. Thus, it seems in-line with our argument that having spirituality at work is a resource that will allow individuals to be emotionally engaged with their job.

The above argument is also consistent with the self-determination theory such that spirituality at work may also be motivating employees to perform better in order to feel better about themselves. This self motivation (Ryan and Deci, 2000) helps employees because it concerns the elements of energy, direction, persistence and equi-finality, all critical elements of activation and intention. Further, this idea of self motivation is also similar with the findings in the study conducted by Milliman, et al. (2003) where they found that the greater the experience of spirituality at work, the greater the intrinsic work satisfaction felt.

### **3.4 Performance as the consequence of work engagement**

In this century, it is undisputed that jobs have become more complex and self-directed. Organizations, especially those in the service industry, are more dependent on their people and are counting human capital as their greatest assets. Employee performances, influenced through their attitudes and behaviours through work engagement, have now become the differentiating factor between a great and mediocre company. In more extreme cases, it can also determine the survivability of organizations.



In Bakker and Demerouti's (2008) paper, they justified why engaged workers perform better: First, engaged workers have positive emotions and are more productive; second, engaged workers tend to have good health - engagement is shown to be positively related to health and lesser psychosomatic complaints such as headaches, chest pains and stomach aches; third, engaged workers are able to mobilize resources and engaged workers are also able to create their own resources and finally, there is a crossover of engagement where there is a transfer of positive (or negative) experiences from one person to the other (Westman, 2001).

Bakker et al. (2006) in their study among 2,229 officers working in one of 85 teams found that team-level work engagement was related to individual team members' engagement after controlling for individual members' job demands and resources. Thus, engaged workers who communicated their optimism, positive attitudes and pro-active behaviours to their colleagues, created a positive team climate, independent of the demands and resources they were exposed to. This suggests that engaged workers influence their colleagues, and consequently, they perform better as a team.

Thus, work engagement is postulated to lead to desired performances sought after by and important to organizations. In today's competitive business environment, organizations must thus attract, hire and ensure that their employees perform well on the job and meet all their job roles, duties and responsibilities (i.e. intra-role behaviours).

Salanova, Agut and Peiro (2005) conducted a study on 342 Spanish contact employees from 58 hotels and 56 restaurants and solicited feedback from 1,140 customers and found that engagement mediated the impact of job resources on service climate, which in turn influenced customer loyalty through customer's assessment of employees' performances. Work engagement is found to be positively related to service quality as perceived by customers. Service quality is arguably an in-role performance. Thus, it seems that engagement is likely to lead to in-role performance.

Schaufeli, Martinez, Marques-Pinto, Salanova and Bakker (2002) studied burnout and engagement on 314 university students and found that engaged students passed more exams during subsequent university semesters. Passing more exams is also an in-role performance since student's main occupation is to study and pass exams too!

In addition to in-role performance, employees are sometimes also expected to contribute beyond their job roles, duties and responsibilities. This extra effort, in the literature, is also referred to as the "Job Soldier Syndrome" (Organ, 1988) or extra-role behaviours.

Katz and Kahn (1966) were amongst the first researchers to differentiate between intra-role and extra-role behaviours. Bateman and Organ (1983) cited Katz and Kahn's work and defined citizenship, supra-role or extra-role behaviour as gestures that lubricates the social machinery of an organization but does not inhere directly to task performance and are acts that cannot be prescribed in given work,

except to some minimally acceptable or enforceable standards. Managers are believed to value such behaviours. Thus, what becomes necessary is not just on the job, task performance or intra-role behaviours but also extra-role behaviours or organization citizenship behaviours in order for one to scale the corporate ladder successfully.

Later researchers such as Williams and Anderson (1991) proved and confirmed that intra-role and extra-role behaviours are indeed separate dimensions of performance and further differentiated extra-role behaviours or organization citizenship behaviours into two distinct categories: Organizational citizenship behavior – individual (OCB-I) and organizational citizenship behavior – organization (OCB-O).

There is another concept that is similar to work engagement - thriving. Thriving is defined as a sense of progress or forward movement in one's self development" (Spreitzer, Sutcliffe, Dutton, Sonenshein and Grant, 2005). According to the handbook on work engagement, thriving and engagement have important overlap because first, both are positive affective motivational states, both dimensions focuses on energy and that the difference is just that engagement is more focused on the present state and thriving is more improvement focused (Bakker and Leiter, 2010). Thus, learning from the research done on thriving, one can postulate that work engagement can potentially lead to in-role behaviour and extra-role behaviour.

As cited in the handbook on work engagement by Bakker and Leiter, (2010),

thriving has been found to matter for in-role and extra-role performance (Porath, Spreitzer, and Gibson, 2008). In a sample of blue-collar trades people, respondents who reported more thriving were described by their bosses as performing better in their jobs. For white-collar employees, they were found to perform better in terms of in-role as well as extra-role performance.

Thriving has also been found to matter for innovative behaviour (Carmeli and Spreitzer, 2008). In a sample of 172 Israeli professionals across a variety of jobs and industries, they found through structural equation modeling that thriving is related to higher levels of innovative behaviour at work. Further, it is interesting to note that thriving mediates the relationship between connectivity and innovation. Thus, in line with our model that connectivity, displayed through having a sense of community, can lead to work engagement and thus innovation.

Thus, innovation is another performance outcome that we can explore as a dimension of performance in my study. However, instead of terming the performance outcome as innovation, I shall use the term employee creativity instead of innovation because it is more in line with the spirituality at work literature, which we shall see in the following paragraph. Employee creativity, can be a valuable performance outcome to help organizations gain a competitive advantage or an edge over its competitors. This is because companies are always in need to innovate and improve on their products and services and creative employees will be able to facilitate this process. In the literature on spirituality at work, creative employees have been alluded to as being able to develop better solutions to deal with the issues that organizations face. For example, Mitroff and

Denton (1999) alluded to creativity and felt that organizations that identify more strongly with spirituality or have a greater sense of spirituality reportedly have employees who bring significantly more of their complete selves to work, specifically their creativity and intelligence in the performance of their jobs. Milliman, et al., (2003) investigated the relationship of workplace spirituality and employee work attitudes and empirically linked organization commitment, intention to quit, intrinsic work satisfaction, job involvement and organization-based self-esteem to other variables of interest to organizations, such as reduced turnover and absenteeism and improved creativity and job performance. Fawcett (2008) found that an inspiring workforce influences the values held by the workforce and the ability to contribute meaningfully promotes the desire to contribute in unique and enterprising ways, initiating a “cycle of creativity” (p.435).

Within the work engagement literature, creativity is also found to be a valued commodity (Gough, 1979). Many organizational scholars have also contended that creativity is critically important to the success of both individual workers and organizations (e.g. Clark and Cropanzano, 1999 in (James, et al., 2004).

Work engagement, as mentioned earlier, have been found to be strongly related to creativity because engaged employees are more willing to solve organizational problems and will employ their creativity to do so and is largely because engagement leads to positive emotions, good health, ability to mobilize resources and ability to create own resources (Bakker and Demerouti, 2008). Of particular interest is the fact that resources such as “joy” broadens resources by creating the

urge to play and be creative (p.216) and thus, creativity as pointed out by the same researchers, becomes a performance outcome in the integrative model of engagement (p.218). Other researcher have linked work engagement with innovativeness (Schaufeli et al., 2006) and thriving, a close cousin related to the concept of engagement, has also been positively associated with creative and innovative behaviour (Carmeli and Spreitzer, 2008).

Salanova, Cifre and Rodriques (2008) sought to improve work engagement through a stress management intervention with inadequate innovation culture as the diagnostic problem. They came up with three strategies to improve work engagement: job redesign, training and supervisor replacement. They found that the most definitive intervention was to replace the supervisor as doing so would improve engagement and thus innovation. Further, Hakanen, Perhoniemi, Toppinen and Tanner (2008) conducted a two-wave 3 year panel study among 2,555 Finnish dentists to examine the energizing power of job resources and related gain spirals. Structural equation modeling confirms that work engagement leads to personal initiative that in turns has a positive impact on work-unit innovativeness. Personal initiative, as discussed, is a conceptually close construct to work engagement. Thus, engagement can be perhaps viewed as leading to innovation or being creativity.

Thus, employee's attitudes and behaviours that would influence their performance, are critical and of huge interest to organizations. This study will thus investigate the four consequences or performance outcomes at the individual level, of work engagement, as in-role behavior, organization citizenship behaviour

- individual (OCB – Individual), organizational citizenship behaviour – Organization (OCB – Organization) and employee creativity as follows:

(a) In-role behaviour refers to the officially desired outcomes of behaviours that directly serve the goals of the organization (Bakker and Leiter, 2010).

(b) Organization citizenship behavior – individual (OCB-I) refers to actions that would benefit the individuals directly and immediately and indirectly through the means contributed to the organization (Williams and Anderson, 1991)

(c) Organization citizenship behavior – organization (OCB-O) refers to actions that would benefit the organization in general (Williams and Anderson, 1991)

(d) Creativity, in the organizational context, refers to the generation of novel and potentially useful ideas (Zhou and George, 2001 in citing Amabile, 1988 and Woodman et al., 1993).

With employee performance having a great impact on companies, interests is of course high in finding out what can predict high employee engagement that may lead to high performance. Thus, this study will empirically test whether spirituality at work, the antecedent of work engagement, can lead to desired performance through work engagement as the mediator.

The following sections will put forth the theoretical and empirical arguments for the hypotheses following the theoretical model.

### **3.5 Spirituality at work and performance**

In the literature, spirituality at work has been linked to many performance outcomes. Where performance outcomes are concerned, there are many different possible levels of analysis, for example, the individual, work unit and organization level.

In this study, I will focus on the performance outcome at the individual level because spirituality at work tend to be a more personal matter and thus I chose to focus on how individual's attitudes will lead to individual level performance outcome including creativity. My approach is congruent with Ashmos and Duchon's (2000) observation, where they concluded that the construct spirituality at work could be too abstract and thus, difficult to comprehend and assess at the work unit and organization level.

The first performance outcome of interest to this study is in-role behaviour as this is the basic performance outcome needed and expected from every employee to keep an organization functioning. In the literature on spirituality at work, many researchers have focused more on linking spirituality at work to extra-role behaviour or organization citizenship behaviour (e.g. Nur and Organ, 2006). Despite this, in-role behaviour can be indirectly linked to productivity and organizational level profitability since it is only with every employee performing efficiently and effectively and exhibiting in-role behaviour that an organization can raise its productivity and profitability. Thus, I infer from the research done by researchers such as Fawcett (2008), Milliman, et al., (2003), Buckingham and



Coffman (1999), Mitroff and Denton (1999), etc that spirituality at work leads to higher productivity made possible through displaying in-role behaviour.

This leads us to Hypothesis 1a:

*Hypothesis 1a: Spirituality at work is positively related to In-role behaviour*

The next performance outcome of interest to this study is organization citizenship behaviour (OCB). Consistent with the empirical studies performed by researchers such as Nur and Organ (2006), individuals will tend to exhibit OCB when they experience spirituality at work. As observed in the literature review of work engagement, it is also evident that OCB can be differentiated into two types, OCB – Individual, where actions taken would benefit the individuals directly and immediately and indirectly through the means contributed to the organization and OCB – Organization, where actions taken would benefit the organization in general (Williams and Anderson, 1991). It will be interesting to see if this performance outcome, OCB, can also be differentiated in the context of spirituality at work (versus in the context of work engagement).

This leads us to hypothesis 1b and 1c:

*Hypothesis 1b: Spirituality at work is positively related to OCB – Individual*

*Hypothesis 1c: Spirituality at work is positively related to OCB – Organization*

Finally, it will also be interesting to see whether spirituality at work can lead to creativity. It is logical to assume that with spirituality at work, individuals will be able to adopt a more open-minded attitude towards work and this could encourage creativity. In the literature, spirituality at work was also linked to creativity and innovation (e.g. Fawcett, 2008; Mitroff and Denton, 1999). In Mitroff and Denton's (1999) study, employees are hungry to bring their spiritual values (and thus their whole person rather than one compartment of themselves) to work but didn't feel comfortable doing so. Thus, if a person can bring his/her whole person, he/she will bring a broader and more open-minded self instead of being forced to leave your creative side or spiritual values or soul at home.

Also, Gilson and Shalley (2004) found that teams with high task inter-dependence, shared goals and participation in problem solving are more likely to attempt creative processes. Theoretically, task inter-dependence has been found to be positively related to the quality of group processes (Wageman, 1995) and task inter-dependence actually increases the motivational aspects of work itself in that team members are encouraged to communicate, exchange resources, and ultimately depend on one another to complete their work (Wageman, 1995). Therefore, task inter-dependence could encourage members to be more flexible and experiment so as to complete their job and this involves engaging in more creative processes. Team members having shared goals are also critical for groups because a shared vision implies agreement on priorities and desired outcomes and high levels of agreement on what is important to a team have been found to increase motivation, efficiency, and effectiveness (Guzzo and Shea, 1992; Shea and Guzzo, 1987). Further, Gladstein (1984) argued that when team members hold

similar goals, they can communicate more effectively, access important information more readily and consider more alternatives in making a decision, all of which should stimulate the creative process.

Finally, team creative processes were measured by Jabri's (1991) measure of individual creative problem solving processes to the team level, reflecting a propensity to approach problem solving in a more creative or more routine, methodical manner. Thus, a creative problem solving approach could be one where ideas are sought outside one's field of expertise, ideas are combined from multiple sources and new alternatives examined. This perhaps requires inputs from others (inter-dependence) and only with shared goals will the team be willing to share ideas. These concepts of inter-dependence and shared goals are akin to the dimensions of spirituality at work – sense of community and alignment with organizational value. With sense of community, team will have more connection and relationship with other and thus, will be more willing to share and thus inter-dependent on each other for inputs. With alignment with organization values, individuals will work towards a common outcome that is shared amongst the team. Thus, I postulate that spirituality at work could also lead to creativity as a performance outcome.

This leads us to hypothesis 1d:

*Hypothesis 1d: Spirituality at work is positively related to creativity*

### **3.6 Spirituality at work and work engagement**

The idea that spirituality at work can lead to work engagement is inspired by many articles in the literature linking spirituality at work to constructs such as organizational commitment, job involvement, job satisfaction and OBSE. These constructs have been empirically linked to work engagement in the literature.

Milliman, et al. (2003) found using structural equation modeling analyses that the greater the experience of spirituality at work, the greater the organization commitment of the individual, intrinsic work satisfaction, job involvement and OBSE.

Rego (2008) performed an empirical study based on 361 individuals from 154 organizations to examine how workplace spirituality (i.e. team's sense of community, alignment with organizational values, sense of contribution to society, enjoyment at work and opportunities for inner life) affects organization commitment (i.e. affective, normative and continuance commitment). He found that when people experience workplace spirituality, they feel more affectively attached to their organizations, experience a sense of obligation/loyalty towards them, and feel less instrumentally committed.

Organization commitment is a conceptually distinct but is empirically and theoretically linked to that of work engagement. In organization commitment, employees identify with and get involved in a particular organization (Mowday, et al., 1979). Mowday et al., (1979) defines organization commitment as a condition in which an individual feels a bond with their organization and wishes to maintain

membership in the organization. The difference between organization commitment and work engagement, as pointed out by Bakker and Leiter, 2010, is just that work engagement is more about being involved with work role or work itself, whereas organization commitment is involvement with the organization.

Similarly, job involvement is also very much related to the concept of work engagement. Job involvement is defined by Lodahl and Kejner (1965) as “the degree to which a person is identified psychologically with his work or the importance of work in his total self image” (p.24). Job involvement thus concerns the degree to which an individual identifies with and actively participates in his/her job and considers his/her performance to be important to their self-esteem (Blau, 1986). To be involved, like the construct commitment above, is also to a certain extent to be engaged since in engagement, it is the harnessing of one’s full self to work actively.

Intrinsic work satisfaction is another interesting construct that is linked to work engagement. Intrinsic work satisfaction involves an individual’s attitudes toward elements related to work such as achievement, responsibility, advancement, and growth (Herzberg et al., 1959). In work satisfaction, or sometimes referred to as job satisfaction, Locke (1976) stated that it is a “pleasurable or positive emotional state resulting from the appraisal of one’s job (p.1300). In Bakker and Leiter’s (2010) handbook, they pointed out that while similar, job satisfaction is concerned with affect towards work and represents satiation. Engagement, on the other hand, is concerned with employee’s mood at work and demotes activation.

OBSE, as pointed out earlier, is the degree to which organizational members believe that they can satisfy their needs by participating in roles within the context of the organization (Pierce, et al., 1989). Employees with high OBSE are satisfied with their organizational role and see themselves as important, meaningful, respected, and worthwhile within their organization. This is connected to engagement, especially in cognitive engagement where employees will perceive themselves as important and thus focus energy in their work performance.

Besides the above constructs following Milliman, et al.'s (2003) paper, two other interesting constructs similar to work engagement are personal initiative and proactive behaviour.

Frese and Fay (2001) felt that employees are often being held to goals that are set by the organizations or supervisors instead of by the employees themselves and thus, "even a concept that goes beyond role requirements, such as organizational citizenship behaviours is in many ways reactive" (p.134). Thus, they argued in favour for an active employee and introduced the concept of personal initiative, defined as work behavior that is characterized by its self-starting nature, its proactive approach and that of being persistent in overcoming difficulties that arise in the pursuit of a goal. Personal initiative is conceptually close to work engagement because engaged workers will be more likely to display positive behaviours to help the organization since they bring their full selves to work and will tend to want to contribute as much as possible.

Salanova and Schaufeli (2008), as mentioned above, studied the mediating role of work engagement using vigour and dedication, among the job resources of job control, feedback and variety, and proactive behaviours at work. Proactive behaviour is defined as ‘taking initiative in improving current circumstances or creating new ones’ (p.116) and is thus similar to the construct personal initiative. Using structural equation modeling on samples of more than 700 participants in Spain and Netherlands, they found that work engagement fully mediates the impact of job resources on proactive behaviour.

Thus, it seems that spirituality at work would lead to work engagement because individuals may feel a sense of loyalty or commitment, can be more involved and thus identifies his performance to his own self-esteem or can be satisfied or motivated to achieve more at work or even to just satisfy their own needs by wanting to be respected in the context of their organization. Thus, work engagement in its three dimensions: physical, emotional and cognitive will be investigated such that each dimension, on its own, could be possible mediators between spirituality at work and performance.

Spirituality at work, when viewed as a resource, can help individuals derive physical engagement as the workers will tend to be able to expend more energy on their task at hand. For example, with a sense of having meaningful work, individuals will be more focused and determined to excel instead of sitting in front of the computer and zoning out or not really following the discussions during meetings or interactions with colleagues. Thus, they will be physically involved or engaged with their work.

In a study published by Kahn in 1992, he postulated that psychological presence is manifested by: physical presence, cognitive presence and emotional presence. Specifically, physical presence is displayed through being present and displaying indications such as eye contact, nodding, fullness of speech and having proper dialogues than being off track. Thus, arguably, if one is spirited at work, it is very likely that they will also be keen and pro-active. Being keen and pro-active also means that they will display positive sitting postures, eye contact, nodding, etc and all these can be observed through their body language, akin to what Kahn describes as physical presence. Thus, when one embraces spirituality at work, it is possible that the individual will become fully present since there is now a greater sense of meaning and purpose and can thus display the body languages of physical presence or engagement as described by Kahn (1992).

This leads us to hypothesis 2a:

*Hypothesis 2a: Spirituality at work is positively related to physical engagement*

Spirituality at work is also a resource that individuals can draw on to derive emotional engagement so they will feel positive about themselves and be energized, such as in OBSE. Emotional engagement occurs based on the understanding that human desire to fulfil subjective psychological needs or values. Russell and Barret (1999) researched on core affect and defined it as a somewhat generalized emotional state consisting of two independent dimensions of pleasantness (feeling positive) and activation (having a sense of energy). Thus,



where spirituality at work exists, individuals will feel more connected with themselves and others and thus, feel emotionally well, present and engaged.

In Kahn's (1992) study, emotional presence is described as being authentic and not dismissing or denying the content of the dialogue with others. Instead, it is to acknowledge and bring oneself emotionally to the interaction and display the self as a human that is clearly emotionally present and in control. For example, when one feels a sense of community, the individual will be more inclined to support each other. This support can be displayed through active listening where the individual is fully participating and following the conversation. Thus, when a person embraces spirituality at work, emotional presence may be observed such that the person at work brings his/her total self to the dialogue and fully engages in the conversation. This bring of the full self is a display of emotional presence akin to being fully present and being emotionally present, as described by Kahn (1992).

This leads us to Hypothesis 2b:

*Hypothesis 2b: Spirituality at work is positively related to emotional engagement*

Cognitive engagement occurs when individuals define identities for themselves and then allocate them in various work and non-work domains, in reference to the roles they hold (Rich et. al., 2010). Cognitive engagement includes both attention (level or amount of focus and concentration) and absorption (level of engrossment

or the intensity of the focus and concentration). Thus, where cognitive engagement exists, individuals will devote attention and focus on the task at hand.

Spirituality at work is a resource that individuals can draw on to derive cognitive engagement to enable them to go into an attentive mode or “flow” and be better able to focus on their work. For example, when individuals embrace spirituality at work and where they feel that their values align with that of the organization’s values, they will put in more effort and treat their work as priority. Sometimes, work can even take priority over family and friends and such act definitely shows cognitive engagement where the individual focuses or go into a “flow” and can only focus on the work on hand. Also, in such instances, it is also likely that the individuals will work long hours and concentrate on the work because now, they are investing more and deeper effort. This is in line with the literature on work-life balance literature where the self-determination theory explains partially why people work hard (Blustein, 2006). Self-determination theory applies where for many individuals, work may in fact help to shape their identity. And in our example, it is possible that this identity is further strengthened where the individual’s can align or associate his/her identity with that of their organization’s success. Thus, individuals will have even greater motivation and try and achieve or out-serve by going deeper and exploring other alternatives to do better at work. This is akin to Kahn’s notion of cognitive presence.

In Kahn’s (1992) study, cognitive presence is displayed through verbal behaviours such as not just accepting what was said but going on to explore what was really going on for both parties in the dialogue and thus reflecting a deeper cognitive

effort and displaying a fuller presence of the self.

Thus, it follows that where one is spirited at work, they may feel fully present and thus invest into and will be able to think deeper as described by Kahn (1992).

This leads us to hypothesis 2c:

*Hypothesis 2c: Spirituality at work is positively related to cognitive engagement*

### **3.7 Work engagement and performance**

As discussed earlier, work engagement can be categorized into three dimensions: physical, emotional and cognitive (Kahn, 1990). In the literature, many researchers have also linked work engagement to the performance outcomes of in-role behaviour, OCB - Individual, OCB – Organization and creativity. However, it is not common for researchers to explore how each dimension of work engagement (i.e. physical, emotional and cognition) leads to the four performance outcome. Thus, it will be interesting for this study to explore how each dimension of work engagement leads to the different performance outcomes.

One of the contributions to the literature for this paper is to go in-depth and examine what types of engagement really lead to each of the performance outcome. In the literature, very limited number of studies actually split engagement up into the three dimensions of physical, emotional and cognitive. Thus, in hypothesis 3a (i) – 3d (vi), I will put out the relevant in-depth hypothesis.

### ***3.7.1 Physical engagement and performance***

In this section, the focus will be on physical engagement. Physical engagement is a measure of work intensity and is the energy exerted per unit of time (Brown and Leigh, 1996). Physical engagement can be viewed as the physical energies focused or expended on specific task activities. Where physical engagement exists, individuals will feel competent and be able to maintain autonomy and control over different courses of action.

The following hypotheses postulate that physical engagement, one of the dimensions of work engagement can lead to each of the four performance outcomes of in-role behavior, OCB - Individual, OCB – Organization and Creativity.

Physical engagement can lead to in-role behaviour because when one is physically energized and focuses on the task, the person is very likely to do well in that task. This is because all attention and energies will be directed to that task and with effort, good in-role results should ensue.

This leads us to hypotheses 3a(i):

*Hypothesis 3a(i): Physical engagement is positively related to In-role behaviour*

Physical engagement may also lead to OCB – Individual because when one feels very engaged and expends all energies and efforts on a task, it is likely that the

person may develop valuable insights into the task and from there, be able to contribute that extra effort to get better results. Also, someone who is engaged may naturally enjoy work and therefore, may have higher ambitions to climb the corporate ladder. Therefore, they may also indulge the company by putting in efforts over and beyond what is expected to portray oneself in a positive manner for promotions or corporate advancement. Thus, with physical engagement where individuals put in more hours and efforts at work, OCB – Individual can be a likely performance outcome.

This leads us to hypotheses 3a(ii):

*Hypothesis 3a(ii): Physical engagement is positively related to OCB - Individual*

Physical engagement may also lead to OCB – Organization because when one feels very engaged and gain, expends all energies and efforts a work, that person may be more altruistic or believes in the values of the organizations, perhaps believing that they are crucial or critical players integral to the success of their organizations. In such cases, it is very likely that the person will put in more hours to make sure the organization achieves its goals too! Thus, they may indulge the organization and help the organization be successful. Thus, with physical engagement, OCB – Organization can be a likely performance outcome.

This leads us to hypotheses 3a(iii):

*Hypothesis 3a(iii): Physical engagement is positively related to OCB – Organization*

Physical engagement may also lead to creativity because when one feels very engaged and expends all energies and efforts on a task, it is likely that the person may develop valuable insights into the task and from there, be able to contribute that extra effort to get better results. Sometimes, that extra effort may manifest in the manner of being creative due to the generation of novel and potentially useful ideas as defined by (Zhou and George, 2001 in citing Amabile, 1988 and Woodman et al., 1993). Thus, when one spends long hours and focus on the task, one may be creative at the task!

This leads us to hypotheses 3a(vi):

*Hypothesis 3a(vi): Physical engagement is positively related to Creativity*

### ***3.7.2 Emotional engagement and performance***

I also postulate that emotional engagement, the second dimension of work engagement will lead to the four performance outcomes in this study. This leads us to hypotheses 3b(i) – 3b(vi):

When one is emotionally engaged, one have the desire to fulfil subjective psychological needs or values. These needs can be achievement needs or self-

actualization needs and therefore, they will invest more effort into making sure that they perform their role well.

This leads us to Hypothesis 3b(i):

*Hypothesis 3b(i): Emotional engagement is positively related to In-role behaviour*

For emotionally engaged individuals, the desire to fulfil subjective psychological needs or values may exceed the mere delivery of on the job performance. For these individuals, they may seek to invest even more effort to ensure that they perform exceedingly well in order to achieve their needs such as growth or career progression. Thus, emotionally engaged individuals may display OCB – Individual as the performance outcome.

This leads us to Hypothesis 3b(ii):

*Hypothesis 3b(ii): Emotional engagement is positively related to OCB – Individual*

For emotionally engaged individuals, sometimes the desire is also to help their organization become successful. When their organizations prosper, they may feel that they have achieved success too! Thus, such helps to fulfil the individual's subjective psychological needs or values. Thus, emotionally engaged individuals may display OCB – Organization as a performance outcome.

This leads us to Hypothesis 3b(iii):

*Hypothesis 3b(iii): Emotional engagement is positively related to OCB – Organization*

Emotionally engaged individuals may be charged up to constantly think of solutions to do their tasks better. This is in line with their desire to fulfil their needs and values which could be to feel a sense of satisfaction when the tasks are well performed or performed differently. Thus, emotionally engaged individuals may display creativity as the performance outcome.

This leads us to Hypothesis 3b(vi):

*Hypothesis 3b(vi): Emotional engagement is positively related to Creativity*

### **3.7.3 Cognitive engagement and performance**

Finally, I postulate that cognitive engagement, the third and final dimension of work engagement, will also lead to the four performance outcomes in this study. This leads us to hypotheses 3c(i) – 3c(vi).

Cognitive engagement depends on the identities that individuals define for themselves in reference to the roles they hold. Thus, if individuals see themselves as playing an important role and that they want to be viewed as good employee, it is very likely that they will concentrate very much and will be engrossed with their work. In such cases, in-role engagement will be displayed since they see



themselves as important.

This leads us to Hypothesis 3c(i):

*Hypothesis 3c(i): Cognitive engagement is positively related to In-role behaviour*

Cognitive engagement will also very likely lead to OCB – Individual as individuals who see themselves as playing an important role will almost expect to be recognized and rewarded for their role. Thus, as they get engrossed with their work and are engaged, OCB – Individual is likely to be displayed.

This leads us to Hypothesis 3c(ii):

*Hypothesis 3c(ii): Cognitive engagement is positively related to OCB – Individual*

Cognitive engagement will also very likely lead to OCB – Organization as individuals who see themselves as playing an important role will see their role as critical in the organization too. Thus, they will be engrossed with their work and try to make sure that the organization is successful too. Thus, cognitive engagement may lead to OCB – Organization.

This leads us to Hypothesis 3c(iii):

*Hypothesis 3c(iii): Cognitive engagement is positively related to OCB –*

### *Organization*

Finally, cognitive engagement may lead to creativity because individuals who see themselves as playing an important role will try all ways and means to develop solutions to their tasks and these ideas may sometimes be creative. Thus, as individuals seek out ways to do their tasks well in line with their identities and roles, creativity may be displayed.

This leads us to Hypothesis 3c(vi):

*Hypothesis 3c(vi): Cognitive engagement is positively related to Creativity*

## **Chapter 4: Methods**

This chapter will explain the method, measures and methodology underlying this study. The rationale behind the use of the survey method and sample used will be discussed. Further, the pilot study undertaken before the implementation of the actual survey, including the data development and preparation, will be covered.

### **4.1 The Survey Method**

This study employs a paper-and-pencil, hard-copy self-administered survey method. In deciding to use the survey method, care was taken in both the survey measurement and representation. In measurement, the constructs were carefully being worded so that respondents can understand and provide an accurate response. To solicit responses, a hard-copy approach is undertaken to increase participation rate. This is because a distribution by soft-copy email approach may not receive a response or might need further reminders. Thus, hard-copy survey through face-to-face interaction ensures the survey will be completed and returned in time. In representation, care is taken to select the sample and respondents. This is because I want to ensure that there is no coverage error and that our respondents are a fair representation of our target population, which are working adults in Singapore.

The reason to choose a survey method is also because our constructs rely mostly on respondents' feelings of spirituality at work and engagement to work. As discussed in, Hoyle, et. al. (2002), when we want to know something about another person's beliefs, attitudes, behaviours, feelings, perceptions, motivations or plans, that our first recourse is simply to ask them a question. The survey

method is also the most widely used source of information in social sciences. Based on observations, many researchers in the Spirituality at Work realm, as well as Work Engagement also use the survey methods as the primary research tool. Thus, this paper will rely on the survey method as the mode of measurement.

## **4.2 The Survey Measures**

The instruments in the survey include spirituality at work, work engagement and performance and will be elaborated in the following sections.

### **4.2.1 Spirituality at work**

There are four sub-scales reflecting spirituality at work: Meaningful work (6 questions), sense of community (7 questions), alignment with organizational values (8 questions) and inner life (5 questions). They are adapted from two papers: Milliman, Czaplewski and Ferguson (2003) and Ashmos and Duchon (2000). In fact, the first paper relied heavily on the second paper, with the exception of the element, sense of community that was developed by the authors of the first paper.

In another research paper, Geh (2009), he also uses the four sub-scales because the researcher believes that they capture Mitroff and Denton's (1999) seminal definition of spirituality as "the basic feeling of being connected with one's complete self, others and the entire universe" since it reflects the three important dimensions relating to the spiritual self such as inner life, meaning of work, and organizational values. Organizational values also include items reflecting the sense of connection between the individual and the organization as spirituality in

the workplace is greatly enhanced when individuals experience a strong sense of alignment between their personal values and the organization's mission and values.

The following will recap the key definitions of the key variables and describe the source of the questions.

*Meaningful work.* The search to find meaningful work has been an ongoing process. And in the spirituality at work realm, work is deemed as more than just being interesting and challenging. Work is about searching for deeper meaning and purpose, living one's dream, expressing one's inner life needs and contributing to others. Work is a vocation to create greeting meaning and identity in the workplace (Ashmos and Duchon, 2000; Fox, 1994; Moore, 1992). This element is based on six items from Ashmos and Duchon (2000) spirituality scale.

*Sense of community.* Sense of community was articulated in Ashmos and Duchon's (2000) paper as having a deep connection to, or relationship with others. This sub-scale is based on seven items as developed by Milliman, Czaplewski and Ferguson (2003) because they wanted to focus on the sense of community experienced by workers, rather than enabling conditions or outcomes of community in the original Ashmos and Duchon (2000) spirituality scale.

*Alignment with organizational values.* This dimension of spirituality at work is where individuals experience a strong sense of alignment between their personal values and their organization's mission and purpose. This sub-scale includes eight

items from Ashmos and Duchon (2000) spirituality scale. The three elements discussed so far were used in Milliman, Czaplewski and Ferguson (2003) scale.

*Inner life.* To measure inner life, I went back to the original paper by Ashmos and Duchon (2000) on the conceptualization and measures of Spirituality at Work. Inner life, according to the authors is composed of items that capture the hopefulness, awareness of personal values and concern for spirituality. I decided to add this element back to the survey instrument instead of using just the three dimensions in Milliman, Czaplewski and Ferguson (2003) paper because inner life, is a behavior that will be manifested when spirituality is practiced by an individual. We note Ashmos and Duchon's (2000) caution that the behaviours might plausibly express the inner life dimension.

#### **4.2.2 Work Engagement**

There are three engagement levels: Physical engagement (6 questions), emotional engagement (6 questions) and cognitive engagement (6 questions). The three subscales of work engagement and they are measured using a total of 18 survey questions and are adapted from Rich, et al., (2010) work on work engagement. The following will summarize the key definitions of the key variables and describe the source of the questions.

*Physical engagement.* In Brown and Leigh's (1996) measure of work intensity, the authors defined physical engagement as the "energy exerted per unit of time" (1996: 362). In this level of engagement, the self can be viewed in terms of physical energies focused or expended on specific task activities. This will allow

the individual to feel competent and be able to maintain autonomy and control over different courses of action. Brown and Leigh (1996) developed a scale to measure work intensity and Rich et. al., (2010) modified the scale and developed six items to measure physical engagement.

*Emotional engagement.* In emotional engagement, emotional reactions are explained as that associated with the human desire to fulfill subjective psychological needs or values. Rich et. al., (2010) developed six items to measure emotional engagement based on a modification of Russell and Barrett's (1999) research on core affect, which defined core affect as a somewhat generalized emotional state consisting of two independent dimensions - pleasantness (feeling positive) and activation (having a sense of energy).

*Cognitive engagement.* Cognitive energy can be allocated in various work and non-work domains according to the identities that individuals define for themselves, in reference to the roles they hold. Rich et. al., (2010) drew on Rothbard's (2001) measure of engagement and developed six questions to measure cognitive engagement. Rothbard's (2001) measure of engagement includes both attention (level or amount of focus and concentration) and absorption (level of engrossment or the intensity of the focus and concentration).

#### **4.2.3 Performance**

There are four performance outcomes that we are measuring: In-role behavior (7 questions), organizational citizenship behavior - Individual (7 questions), organizational citizenship behavior - organization (7 questions) and employee

creativity (13 questions). The four dimensions are measured in Section C, in a total of 34 survey questions and are adapted from two papers: Williams and Anderson (1991) on organizational citizenship and in-role behaviours and Zhou and George (2001) on creativity. The following will recap the key definitions of the key variables and describe the source of the questions.

*In-role behavior.* In-role behaviours are the traditional performance of work in accordance to formal evaluation and rewards system of the company. The authors used three items from O'Reilly and Chatman (1986) paper and added the other four items. All seven items were used in my survey.

*Organizational citizenship behavior - individual.* Organizational citizenship behavior represents discretionary behaviours not directly recognized by the formal evaluation and rewards system of the company but that which promotes the effective functioning of the company as a whole. And Williams and Anderson (1991) categorized this behavior into two types: individual and organization. The first type, organizational citizenship behavior - individual, would benefit the individuals directly and immediately and indirectly through the means contributed to the organization. The scales for organizational citizenship behavior for both individual and organization, seven questions each, were adapted by the authors based on a selection of previous works such as Bateman and Organ (1983), Graham (1986), O'Reilly and Chatman (1986), etc.

*Organizational citizenship behavior - organization.* This second type of behavior, would benefit the organization in general. There are seven questions developed



which I used in my survey.

*Creativity.* Zhou and George (2001) developed a 13 item scale to measure creativity. Zhou and George (2001) defined creativity, in citing Amabile (1988) and Woodman et al. (1993), in the organizational context, as referring to the generation of novel and potentially useful ideas. Of the thirteen items, three items were adopted from Scott and Bruce (1994) and the rest were designed by the authors. All 13 items were incorporated into the survey and follows an unpublished Masters Thesis by Chong (2011).

#### **4. 3 Criteria for Sample Selection**

Three criteria have been identified. Respondents should be working adults because the survey measures the working environment in Singapore. Further, we felt that to have a good sense of the working environment, respondents should have at least one year of working experience in Singapore. Also, the surveys should only be distributed to individuals above the age of 21 years of age as their employment is more likely to be permanent instead of just part-time work arrangements.

Thus, the stipulated criteria is for individuals to be working adults above the age of 21 years old and with at least one year of working experience in Singapore.

#### **4. 4 Sampling Procedures**

A convenience sample is used in this study for 300 respondents. The respondents are friends of the researcher or friends of friends. A drawback of this method, a

non-probability sample method, is that it may be bias. Thus, the researcher neutralizes ensuring that respondents, when asking their friends to distribute, include family members and friends from different religious groups including Christian, Buddhist and Muslim groups of friends.

#### **4. 5 Development of Survey**

The survey comprises a cover page with background information about the survey titled: Survey study on the working environment in Singapore. Following the cover page, there were four sections, totalling 89 questions. The survey is intended for the researcher to distribute by hand to friends and for friends of friends to help in the distribution and collection process. Please refer to Annex A.

Participants rated their responses to three sections of the survey using a five-point Likert scale that ranged from "Strongly Disagree" (1) to "Strongly Agree" (5).

Section A contains 26 questions that describes one's perceptions about his/her organization. Section B contains 18 questions about how a person feels at work. Section C contains 34 questions describing a person's behaviours at work. An additional Section D contains 11 questions on background information and does not follow the Likert scale.

All instructions are clearly stated in the survey cover page as well as at the start of each of the four sections. All the data, as clearly stated in the cover page, will be kept private and confidential and will not be disclosed to anyone, except for the verification study, if required by the thesis committee.

#### **4.6 Pre-testing the Survey**

The surveys were first pre-tested with a pilot group of 30 individuals to ensure that the survey is sound, logical and clear in its language. I also hope to detect potential flaws in the survey design and to pick up unclear instructions. Further, I wanted to ensure that distribution by hand and through friends of friends is feasible and that the time needed to complete the survey is within a reasonable time-frame of less than 30 minutes.

The results of the pilot tests are that the survey was sound although respondents felt that there were some overlap in the questions being asked. Later confirmation showed that those were reverse questions thus the survey questions were deemed to be sound. There were no feedback on the survey design and the respondents felt that the instructions given were clear. The method of distribution by hand and through friends of friends proved to be feasible and on average, participants only took 15 minutes to complete the survey.

The feedbacks received were subsequently incorporated into the final survey before distributing to the survey respondents.

#### **4.7 Implementation of Survey**

The final survey was submitted to the Singapore Management University's Institutional Review Board ("IRB") for expedited review to ensure that this research is not only scientifically sound but also conducted with diligence and integrity and in full compliance with internationally established standards of research ethical principles. Please refer to Annex B for the IRB approval letter.

The approved surveys were then distributed by hand by the researchers personally to friends and sometimes, friends were asked to distribute to their own group of friends or spouse. The participants were informed that the survey was designed to deepen our understanding of the working environment in Singapore and that their responses to the survey would be kept strictly confidential. Where personal information are required, it will be used for a verification study and all completed surveys will be securely stored under lock and key and the consolidated data will be password protected where only the researchers will have access to. The distribution and collection process took a total of 3.5 months to complete.

#### **4.8 Respondent's characteristics**

The majority of the respondents (54.33%) are between 21-30 years old. The gender distribution is quite even, with male representing 48.67% and female 51.33%. The summary of the respondent's profile is presented in the table below. The work experience of the respondents are quite evenly distributed, with the majority with 3-5 years (28.67%) and 6-10 years (21.33%). Most of the respondents are less than 5 years in their current organization, totalling 67.67%.

81% of the respondents are from the private sector - foreign owned, 49% and locally owned, 32%. 87% of the respondents are holding junior to middle level positions in the organization.

68.33% holds at least a degree and almost 20% holds a diploma or equivalent. The respondents are mainly Buddhist, 26.33%; Christian, 22.33% and Muslim, 8.33%.

Many of the respondents have no religion too (i.e. 23.33%). Please refer to details below:

**Table 2: Demographic Profiles of Respondents**

<b><u>Age</u></b>	<b>Percentage (%)</b>
21-25 years	16.00
26-30 years	38.33
31-35 years	17.00
36-40 years	11.33
41 years and above	17.33
<b><u>Gender</u></b>	<b>Percentage (%)</b>
Male	48.67
Female	51.33
<b><u>Work Experience</u></b>	<b>Percentage (%)</b>
1-2 years	14.00
3-5 years	28.67
6-10 years	21.33
11-15 years	13.33
16 years or more	22.67
<b><u>Length of service in present company</u></b>	<b>Percentage (%)</b>
6 months to less than one year	13.67
1-2 years	22.33
3-5 years	31.67
6-10 years	16.67
11 years or more	15.67
<b><u>Nature of Organization</u></b>	<b>Percentage (%)</b>
Private Sector (Foreign-owned)	49.00
Private Sector (Locally-owned)	32.00
Government-Linked Company/	14.33
Civil Service/ Government Sector	
Non-profit Organizations and others	4.67
<b><u>Position in Organization</u></b>	<b>Percentage (%)</b>
Owner/ Partner/ Top Management/ Upper/ Middle Level	13.00
Middle Level	31.67
Lower/ Middle Level	32.67
Junior Level	22.67
<b><u>Education</u></b>	<b>Percentage (%)</b>
Graduate degree or equivalent	23.33
Degree or equivalent	45.00
Diploma or equivalent	19.67
Junior College or equivalent/ Secondary or equivalent/	12.00
Others	
<b><u>Religion</u></b>	<b>Percentage (%)</b>
Buddhist	26.33
Catholic	7.67
Christian	22.33
Hindu	4.00
Muslim	8.33
Taoist	4.67
None	23.33
Others	3.33

#### **4.9 Statistical Analysis**

The data was entered and processed using STATA Version 10 for Windows statistical package. Reverse coding was performed for the items in the surveys where necessary, before the analysis was carried out.

A mediated regression is used to analyse the data. In Baron and Kenny's (1986) paper, it was mentioned that mediators speak of how and why effects occur and that there exist a three-variable system such that there are two casual paths (i.e. the direct impact of the independent variable and the impact of the mediator) feeding into the outcome variable, together with another path from the independent variable to the mediator.

To test for mediation, three regression equations are needed (Judd and Kenny, 1981). First, the regressing the mediator on the independent variable; second, regressing the dependent variable on the independent variable; and finally, regressing the dependent variable on both the independent variable and on the mediator. And to establish mediation, the following conditions must hold. First, the independent variable must affect the mediator; second, the independent variable must be shown to affect the dependent variable; and finally, the mediator must affect the dependent variable. Where all three conditions hold in the predicted direction, the effect of the independent variable on the dependent variable must be less in the third equation than in the second.

In this study, the four dimensions of spirituality at work: Meaningful work, sense of community, alignment with organizational values and inner life would be the

independent variables. The three dimensions of engagement: Physical engagement, emotional engagement and cognitive engagement would be the mediators. Performance will include four performance outcomes: In-role behaviour, organizational citizenship behaviour - Individual, organizational citizenship behaviour - organization and employee creativity and would be the dependent variables.

#### **4.10 Control variables**

Mitchell (1985) argued that researchers try to actively conceptualize and measure variables that may serve as potential confounds. In this paper, we included 11 control variables and they are: Age, Gender, number of years of working experience, length of service in present organization, nature of organization, position in organization, education level and religion.

The analysis and results will be covered in Chapter 5.

## **Chapter 5: Results and Analysis**

### **5.1 Psychometric properties of scales**

The measures employed in this study, namely, spirituality work, work engagement, performance are established scales. Hence, the measurement scales used here are not factor analyzed as they are validated instruments developed.

### **5.2 Descriptive statistics and inter-correlation matrix**

The mean and standard deviation of meaningful work, a dimension of spirituality at work, are 3.66 and 0.63 respectively. The mean and standard deviation of sense of community, a dimension of spirituality at work, are 3.79 and 0.60 respectively. The mean and standard deviation of alignment of values, a dimension of spirituality at work, are 3.58 and 0.63 respectively. The mean and standard deviation of inner life, a dimension of spirituality at work, are 3.17 and 0.72 respectively.

The mean and standard deviation of physical engagement, a dimension of work engagement, are 4.04 and 0.53 respectively. The mean and standard deviation of emotional engagement, a dimension of work engagement, are 3.87 and 0.66 respectively. The mean and standard deviation of cognitive engagement, a dimension of work engagement, are 3.98 and 0.52 respectively.

The mean and standard deviation of in-role behaviour, a dimension of performance, are 4.05 and 0.44 respectively. The mean and standard deviation of organizational citizenship behaviour - internal, a dimension of performance, are 3.78 and 0.44 respectively. The mean and standard deviation of organizational



citizenship behaviour - organization, a dimension of spirituality at work, are 3.92 and 0.46 respectively. The mean and standard deviation of creativity, a dimension of spirituality at work, are 3.65 and 0.53 respectively.

### **5.3 Control Variables**

The control variables of this study are chosen to be gender and education and their mean scores are 1.51 and 2.3. Their standard deviations are 0.5 and 1.16 respectively. Gender and education are chosen because both the factors may otherwise influence the impact of the independent variable on the dependent variable.

In the inter-correlation matrix performed, the alpha coefficient for the independent variables, mediators and dependent variables are also quite high and exceeds 0.7 for most of the measures (Except OCB - O) and thus, they are consistent and reliable. Higher values of alpha are more desirable as a rule of thumb, require a reliability of 0.70 or higher (Nunnally, 1978). Basing the reliability assessment on the threshold value being at least 0.7 indicates that the items are internally consistent.

According to Bilings and Wroten (1978), correlation coefficients that are lower than 0.80 are generally acceptable. Multi-collinearity refers to a situation where the explanatory variables are highly inter-correlated and can produce unstable regression results. In our study, multi-collinearity is not a major threat since the correlation coefficients are less than 0.80.

**Table 3: Inter-correlation matrix**

	Mean	Standard Deviation	Spirituality at work				Work Engagement			Performance				Control					
			Meaningful work	Sense of community	Alignment of organizational values	Inner life	Physical engagement	Emotional engagement	Cognitive engagement	In-role	OCB - Internal	OCB - Organization	Creativity	Age	Gender	Work experience	Length of service	Position	Education
Meaningful work	3.66	0.63	(0.89)																
Sense of community	3.79	0.60	0.69***	(0.88)															
Alignment of organizational values	3.58	0.63	0.71***	0.77***	(0.91)														
Inner life	3.17	0.72	0.57***	0.50***	0.61***	(0.85)													
Physical engagement	4.04	0.53	0.41***	0.33***	0.33***	0.33***	(0.91)												
Emotional engagement	3.87	0.66	0.75***	0.56***	0.59***	0.48***	0.58***	(0.94)											
Cognitive engagement	3.98	0.52	0.39***	0.37***	0.42***	0.37***	0.71***	0.57***	(0.92)										
In-role	4.05	0.44	0.18**	0.15*	0.14*	0.04	0.39***	0.32***	0.45***	(0.77)									
OCB - Internal	3.78	0.44	0.22***	0.31***	0.33***	0.26***	0.31***	0.27***	0.37***	0.36***	(0.79)								
OCB - Organization	3.92	0.46	0.13*	0.17**	0.17**	-0.02	0.33***	0.24***	0.37***	0.59***	0.30***	(0.62)							
Creativity	3.65	0.53	0.34***	0.29***	0.34***	0.20***	0.44***	0.49***	0.44***	0.40***	0.50***	0.27***	(0.94)						
Age	32.56	8.52	-0.11	-0.20***	-0.07	-0.04	0.04	-0.02	0.07	-0.03	0.00	0.09	0.085	1					
Gender	1.51	0.50	-0.12*	-0.10	-0.06	0.01	-0.11	-0.13*	-0.09	-0.15*	0.04	-0.04	-0.19**	-0.12*	1				
Work experience	10.01	8.59	-0.10	-0.19**	-0.02	0.02	0.07	0.01	0.09	-0.02	0.06	0.13*	0.09	0.90***	-0.01	1			
Length of service	4.92	6.13	-0.02	-0.06	0.04	0.02	0.08	0.04	0.09	0.00	0.08	0.05	0.12*	0.61***	0.03	0.64***	1		
Position	4.58	1.12	0.03	0.11	0.11	0.07	-0.04	-0.09	-0.08	-0.16**	0.01	-0.10	-0.20***	-0.35***	0.04	-0.31***	-0.29***	1	
Education	2.30	1.16	-0.12*	-0.15**	-0.09	0.03	-0.17**	-0.14*	-0.15**	-0.30***	0.04	-0.18**	-0.17**	0.20***	0.11	0.26***	0.16**	0.15*	1

Legend: \* p<0.05 \*\* p<0.01 \*\*\* p<0.001

() Parenthesis denotes Alpha-Coefficient

## 5.4 Results and findings

### 5.4.1 Physical engagement and its effects on spirituality at work and performance

The mediation relations of physical engagement between spirituality at work and performance are summarized in Figure 3 below.

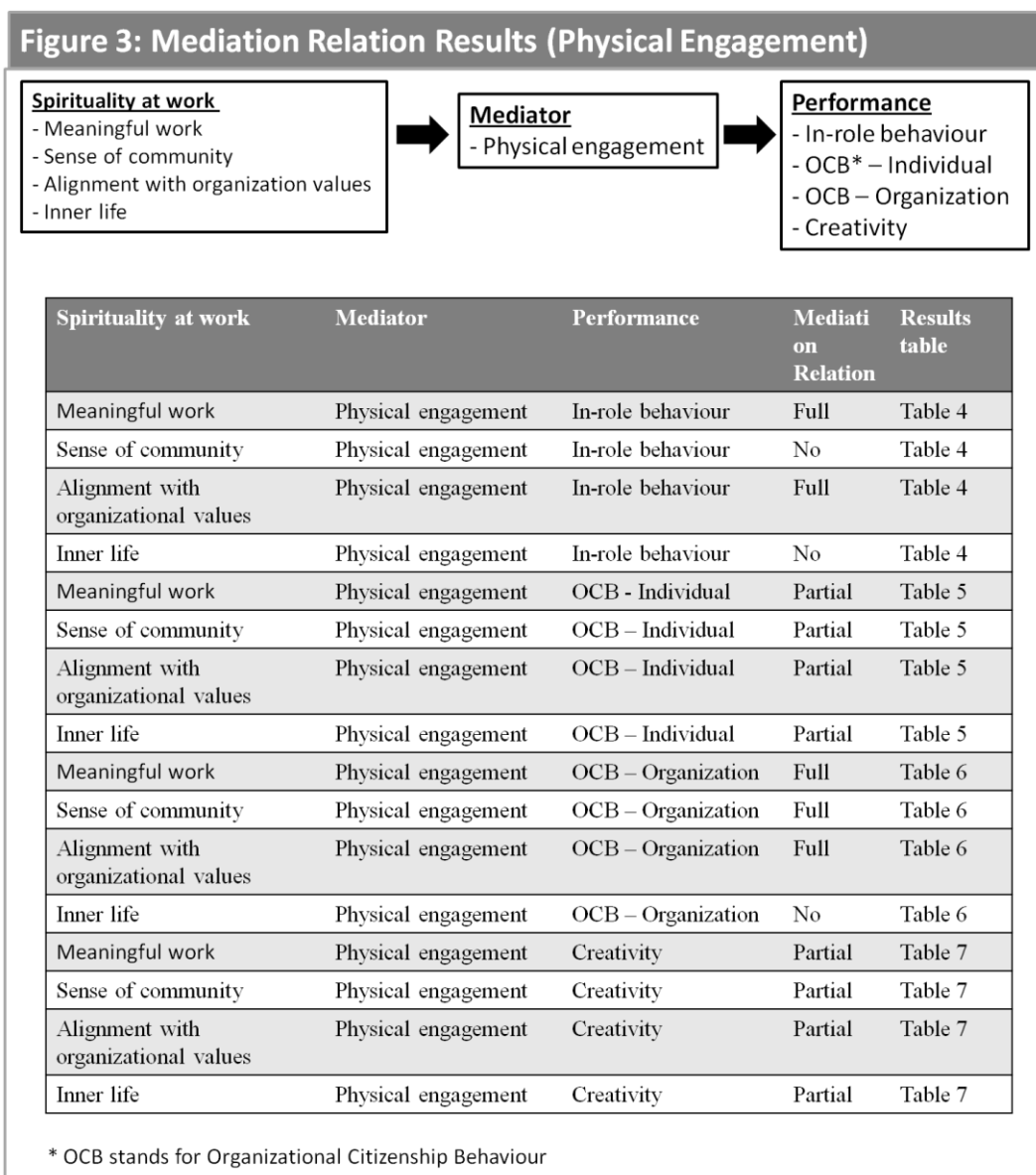


Table 4 below shows the results into investigating the mediating effects of **physical engagement** (i.e. mediator or “M”) between the four dimensions of spirituality at work of meaningful work, sense of community, alignment with organization values and inner life (i.e. independent variable or “IV”) and with **in-role behaviour** as the performance outcome (i.e. dependent variable or “DV”).

**Table 4. In-role behaviour (Mediator: Physical Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
In-role behavior		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
	<b>Step 1: M on IV</b> <i>Control:</i> Gender Education	0.39*** -0.05 -0.12*	0.31*** -0.07 -0.12*	0.32*** -0.08 -0.13*	0.34*** -0.09 -0.17**
	<b>Step 2: DV on IV</b> <i>Control:</i> Gender Education	0.14* -0.10 -0.27***	0.10 -0.11 -0.28***	0.11* -0.11* -0.28***	0.05 -0.11* -0.29***
	<b>Step 3: DV on IV M</b> <i>Control:</i> Gender Education	0.00 0.34*** -0.08 -0.23***	-0.01 0.35*** -0.08 -0.24***	0.00 0.34*** -0.08 -0.23***	-0.08 0.37*** -0.08 -0.23***
<b>Mediation Effect</b>		Full	No	Full	No

Note: \*\*\* significant at  $P < 0.001$ ; \*\* significant at  $P < 0.01$ ; \*significant at  $P < 0.05$

For hypothesis 1a, the spirituality at work dimensions of meaningful work and alignment with organization values are positively and significantly related to in-role behaviour but not for the dimensions of sense of community and inner life (as seen in Step 2). Thus, hypothesis 1a is partially supported. Spirituality at work is shown to be positively related to physical engagement, as seen in Step 1. Thus, hypothesis 2a is fully supported. Finally, physical engagement is shown to be

positively and significantly related to in-role behaviour (as seen in Step 3), supporting hypothesis 3a(i) fully.

Further, as seen in column 1 and 3, physical engagement is positively and significantly associated with meaningful work and alignment with organization values. Meaningful Work and organization values are also found to have a positive and significant relation with in-role behaviour and this relation disappears in the presence of physical engagement. Thus, full mediating effect is evident for the relationship between meaningful work and alignment with organization values with physical engagement as the mediator and in-role behaviour as the performance outcome.

In column 2 and 4, on the other hand, physical engagement is positively and significantly associated with sense of community and inner life. Sense of community and inner life, however, is not found to have a positive and significant relation with in-role behaviour and thus, mediating effect is not found for the relationship between sense of community and inner life with physical engagement as the mediator and in-role behaviour as the performance outcome.

Thus, in conclusion, full mediation effect exist for the relationship between spirituality at work's dimensions of meaningful work and alignment with organization values but no mediating effect occurs for the dimensions of sense of community and inner life.

Table 5 shows the results of physical engagement as mediator between the four dimensions of spirituality at work of meaningful work, sense of community, alignment with organization values and inner life (i.e. independent variable or “IV”) and **organizational citizenship behaviour – individual** (i.e. the dependent variable or “DV”).

**Table 5. Organizational citizenship behaviour - Individual (Mediator: Physical Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
Organizational citizenship behaviour-Individual	<b>Step 1: M on IV</b>	0.39***	0.31***	0.32***	0.34***
	<i>Control:</i>				
	Gender	-0.05	-0.07	-0.08	-0.09
	Education	-0.12*	-0.12*	-0.13*	-0.17**
	<b>Step 2: DV on IV</b>	0.24***	0.33***	0.34***	0.26***
	<i>Control:</i>				
	Gender	0.06	0.06	0.05	0.03
	Education	0.06	0.09	0.07	0.03
	<b>Step 3: DV on IV M</b>	0.13*	0.25***	0.26***	0.17**
	<i>Control:</i>				
	Gender	0.07	0.08	0.07	0.06
	Education	0.10	0.11*	0.10	0.08
<b>Mediation Effect</b>		Partial	Partial	Partial	Partial

Note: \*\*\* significant at  $P < 0.001$ ; \*\* significant at  $P < 0.01$ ; \*significant at  $P < 0.05$

For hypothesis 1b, all spirituality at work dimensions of meaningful work, sense of community, alignment of values and alignment with organization values are positively and significantly related to organizational citizenship behaviour – individual (as seen in Step 2). Thus, hypothesis 1b is supported. Spirituality at work is shown to be positively related to physical engagement, as seen in Step 1.

Thus, hypothesis 2a is fully supported. Moreover, physical engagement is shown to be positively and significantly related to organizational citizenship behaviour – individual (as seen in Step 3), supporting hypothesis 3a(ii) fully.

Further, as seen in columns 1, 2, 3 and 4, physical engagement is positively and significantly associated with all spirituality at work's dimensions of meaningful work, sense of community, alignment of values and alignment with organization values. All four dimensions are also found to have a positive and significant relation with organizational citizenship behaviour - individual but this relation decreases in magnitude while still significant in the presence of physical engagement. Thus, partial mediating effect is evident for the relationship between the four dimensions of spirituality at work with physical engagement as the mediator and organizational citizenship behaviour - individual as the performance outcome.

Thus, in conclusion, partial mediation effect exists for the relationship between all spirituality at work's dimensions of meaningful work, sense of community, alignment of values and alignment with organization values and organizational citizenship behaviour – individual.

Table 6 shows the results of physical engagement as mediator between the four dimensions of spirituality at work of meaningful work, sense of community, alignment with organization values and inner life (i.e. independent variable or “IV”) and **organizational citizenship behaviour – organization** (i.e. the dependent variable or “DV”).

**Table 6. Organizational citizenship behaviour - Organization (Mediator: Physical Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
Organizational citizenship behaviour-Organization		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
	<b>Step 1: M on IV</b> <i>Control:</i> Gender Education	0.39*** -0.05 -0.12*	0.31*** -0.07 -0.12*	0.32*** -0.08 -0.13*	0.34*** -0.09 -0.17**
	<b>Step 2: DV on IV</b> <i>Control:</i> Gender Education	0.11* -0.01 -0.16**	0.15** -0.01 -0.15**	0.16** -0.02 -0.16**	-0.02 -0.03 -0.17**
	<b>Step 3: DV on IV M</b> <i>Control:</i> Gender Education	-0.01 0.32*** 0.00 -0.13*	0.06 0.29*** 0.01 -0.12*	0.07 0.29*** 0.00 -0.12*	-0.14* 0.36*** 0.01 -0.11*
<b>Mediation Effect</b>		Full	Full	Full	No

Note: \*\*\* significant at  $P < 0.001$ ; \*\* significant at  $P < 0.01$ ; \*significant at  $P < 0.05$

For hypothesis 1c, the spirituality at work dimensions of meaningful work, sense of community and alignment with organization values are positively and significantly related to organizational citizenship behaviour - organization but not for the dimension of inner life (as seen in Step 2). Thus, hypothesis 1c is partially supported. Spirituality at work is shown to be positively related to physical engagement, as seen in Step 1. Thus, hypothesis 2a is fully supported. Finally, physical engagement is shown to be positively and significantly related to organizational citizenship behaviour - organization (as seen in Step 3), supporting hypothesis 3a(iii) fully.



Further, as seen in column 1, 2 and 3, physical engagement is positively and significantly associated with meaningful work, sense of community and alignment with organization values. Meaningful work, sense of community and organization values are also found to have a positive and significant relation with in-role behaviour and this relation disappears in the presence of physical engagement. Thus, full mediating effect is evident for the relationship between meaningful work, sense of community and alignment with organization values with physical engagement as the mediator and organizational citizenship behaviour - organization as the performance outcome.

In column 4, on the other hand, physical engagement is positively and significantly associated with inner life. Inner life, however, is not found to have a positive and significant relation with in-role behaviour and thus, mediating effect is not found for the relationship between sense of community and inner life with physical engagement as the mediator and in-role behaviour as the performance outcome.

Thus, in conclusion, full mediation effect exist for the relationship between spirituality at work's dimensions of meaningful work, sense of community and alignment with organization values but no mediating effect occurs for the dimension of inner life.

Table 7 shows the results of physical engagement as mediator between the four dimensions of spirituality at work of meaningful work, sense of community,

alignment with organization values and inner life (i.e. independent variable or “IV”) and **creativity** (i.e. the dependent variable or “DV”).

**Table 7. Employee Creativity (Mediator: Physical Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
Creativity		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
	<b>Step 1: M on IV</b>	0.39***	0.31***	0.32***	0.34***
	<i>Control:</i> Gender Education	-0.05 -0.12*	-0.07 -0.12*	-0.08 -0.13*	-0.09 -0.17**
	<b>Step 2: DV on IV</b>	0.31***	0.26***	0.32***	0.30***
	<i>Control:</i> Gender Education	-0.14* -0.12*	-0.15** -0.11*	-0.16** -0.12*	-0.17** -0.16**
	<b>Step 3: DV on IV M</b>	0.18*** 0.34***	0.14* 0.37***	0.21*** 0.35***	0.18*** 0.35***
	<i>Control:</i> Gender Education	-0.12* -0.08	-0.13* -0.07	-0.13* -0.08	-0.14** -0.10
<b>Mediation Effect</b>		Partial	Partial	Partial	Partial

Note: \*\*\* significant at  $P < 0.001$ ; \*\* significant at  $P < 0.01$ ; \*significant at  $P < 0.05$

For hypothesis 1d, all spirituality at work dimensions of meaningful work, sense of community, alignment of values and alignment with organization values are positively and significantly related to creativity (as seen in Step 2). Thus, hypothesis 1d is supported. Spirituality at work is shown to be positively related to physical engagement, as seen in Step 1. Thus, hypothesis 2a is fully supported. However, physical engagement is shown to be positively and significantly related to creativity (as seen in Step 3), supporting hypothesis 3a(iv) fully.

Further, as seen in columns 1, 2, 3 and 4, physical engagement is positively and significantly associated with all spirituality at work's dimensions of meaningful work, sense of community, alignment of values and alignment with organization values. All four dimensions are also found to have a positive and significant relation with creativity but this relation decreases in magnitude while still significant in the presence of physical engagement. Thus, partial mediating effect is evident for the relationship between the four dimensions of spirituality at work with physical engagement as the mediator and creativity as the performance outcome.

Thus, in conclusion, partial mediation effect exists for the relationship between all spirituality at work's dimensions of meaningful work, sense of community, alignment of values and alignment with organization values and inner life.

#### **5.4.2 Discussion on the Findings for Tables 4 – 7**

Tables 4 – 7 shows the regression results of the mediating effects of physical engagement on the relationship between spirituality at work and performance. In summary for Table 6, the results show that full mediation exists between physical engagement between meaningful work, alignment with organization values and in-role behaviour as expected.

No mediating effect, however, is found between sense of community, inner life and in-role behaviour. To explain for this, it seems possible that regardless of whether one feels like being part of the community or whether one seek inner life, for sustenance and to stay employed, one ought to perform on the job duties and

responsibilities. After all, according to Bakker and Leiter (2010), in-role behaviours are the officially desired outcomes of behaviours that directly serve the goals of the organization. Through inference thus, these in-role outcomes does not serve individual's needs such as feeling accepted in a community or seeking to have an inner life, referring to practices such as meditation, self-reflection, prayer, etc (Ashmos and Duchon, 2000). Thus, no mediation effect exists. Interestingly, there is full mediation effect for meaningful work and one explanation could be that meaningful may be linked to the attainment of financial rewards (i.e. the joy of working) and thus individuals would have the motivation and engagement to perform well in-role.

Both Table 5 and Table 7 show partial mediating effects of physical engagement between all dimensions of spirituality at work and OCB - I and creativity. Thus, it can be argued that spirituality at work need not work through physical engagement to lead to OCB – I and creativity. By having a sense of meaning at work, for example, one may be motivated perhaps because the task or job is a dream job, thus, they may use their personal time to contribute and think about work and this might lead to OCB – I and creativity since both OCB – I and creativity are both arguably discretionary effort. It may not be fully explained by the physically engagement since being present and focused may not be sufficient to lead to OCB – I and creativity. Other factors such as the intellect, aptitude, abilities, pro-activity and other attributes may better explain relationship.

Table 6, shows full mediating effects of physical engagement between meaningful work, sense of community and alignment with organization values and OCB - O.

However, no mediating effect is shown for between inner life and OCB – O. This could probably be attributed to the fact that inner life affects the self or individual more than for the organization's benefit. Interestingly, as cited in Bakker and Leiter (2010), a research done by Halbesleben and Bowler (2005) argued that there are three types of “strivings” or reasons why individuals will work hard. Specifically, status striving is one that will push individuals to achieve OCB – O. Thus, an individual with inner life may not necessary want to achieve status in life and may instead be happy with contentment, thus explaining why physical engagement is not a mediator between inner life and OCB – O.

### 5.4.3 Emotional engagement and its effects on spirituality at work and performance

The mediation relations of emotional engagement between spirituality at work and performance are summarized in Figure 4 below.

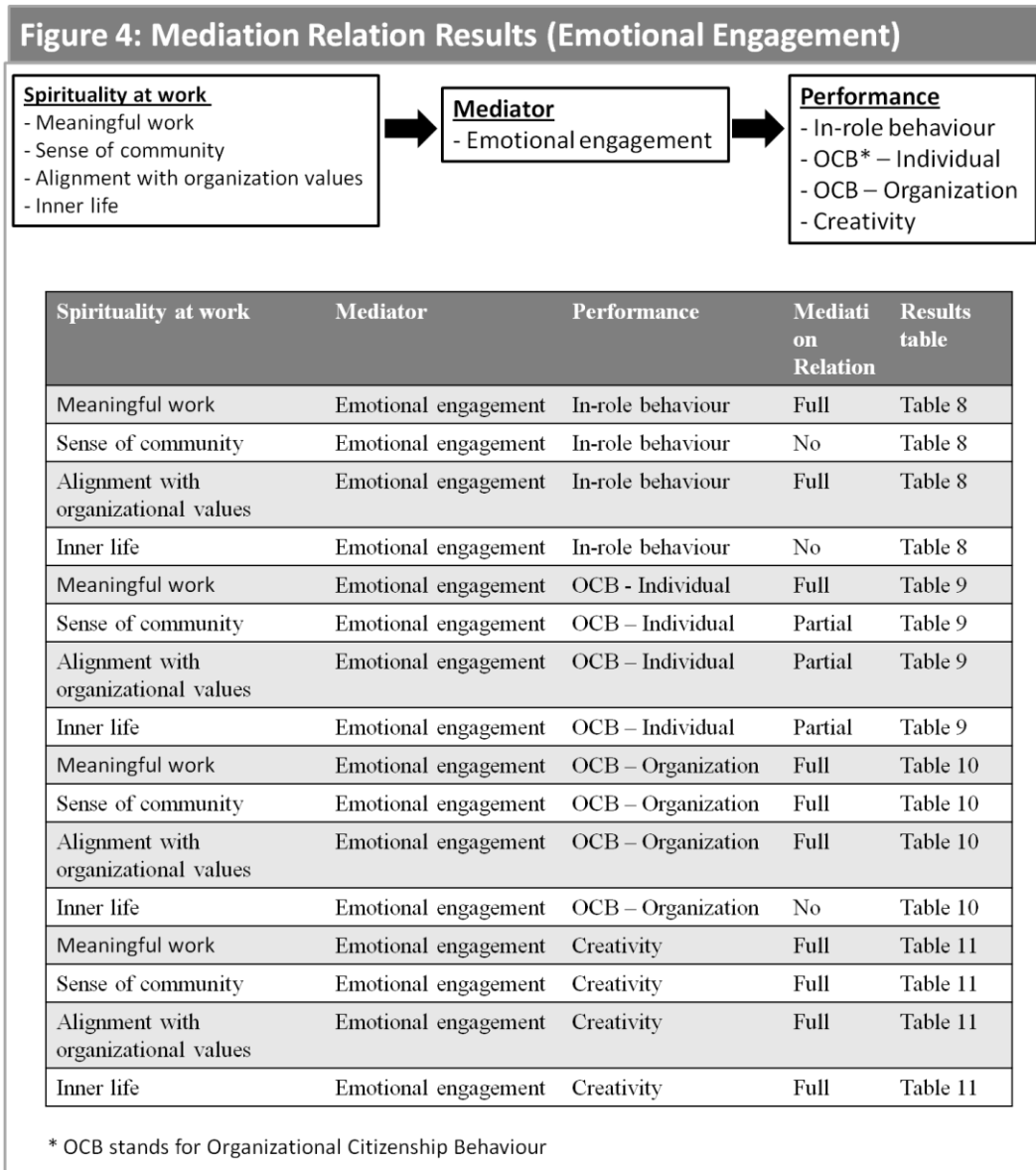


Table 8 shows the results of emotional engagement as mediator between the four dimensions of spirituality at work of meaningful work, sense of community,

alignment with organization values and inner life (i.e. independent variable or “IV”) and **in-role behaviour** (i.e. the dependent variable or “DV”).

**Table 8. In-role behaviour (Mediator: Emotional Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
In-role behaviour		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
	<b>Step 1: M on IV</b>	0.73***	0.54***	0.57***	0.49***
	<i>Control:</i> Gender	-0.03	-0.07	-0.09	-0.12*
	Education	-0.05	-0.05	-0.08	-0.15**
	<b>Step 2: DV on IV</b>	0.14*	0.10	0.11*	0.05
	<i>Control:</i> Gender	-0.10	-0.11	-0.11*	-0.11*
	Education	-0.27***	-0.28***	-0.28***	-0.29***
	<b>Step 3: DV on IV M</b>	-0.14	-0.08	-0.07	-0.11
	<i>Control:</i> Gender	0.38***	0.32***	0.32***	0.33***
	Education	-0.09	-0.08	-0.08	-0.08
		-0.25***	-0.26***	-0.25***	-0.24***
<b>Mediation Effect</b>		<b>Full</b>	<b>No</b>	Full	No

Note: \*\*\* significant at  $P < 0.001$ ; \*\* significant at  $P < 0.01$ ; \*significant at  $P < 0.05$

For hypothesis 1a, the spirituality at work dimensions of meaningful work and alignment with organization values are positively and significantly related to in-role behaviour but not for the dimensions of sense of community and inner life (as seen in Step 2). Thus, hypothesis 1a is partially supported. Spirituality at work is shown to be positively related to emotional engagement, as seen in Step 1. Thus, hypothesis 2b is fully supported. Finally, emotional engagement is shown to be positively and significantly related to in-role behaviour (as seen in Step 3), supporting hypothesis 3b(i) fully.

Further, as seen in column 1 and 3, emotional engagement is positively and significantly associated with meaningful work and alignment with organization values. Meaningful Work and organization values are also found to have a positive and significant relation with in-role behaviour and this relation disappears in the presence of emotional engagement. Thus, full mediating effect is evident for the relationship between meaningful work and alignment with organization values with emotional engagement as the mediator and in-role behaviour as the performance outcome.

In column 2 and 4, on the other hand, emotional engagement is positively and significantly associated with sense of community and inner life. Sense of community and inner life, however, is not found to have a positive and significant relation with in-role behaviour and thus, mediating effect is not found for the relationship between sense of community and inner life with emotional engagement as the mediator and in-role behaviour as the performance outcome.

Thus, in conclusion, full mediation effect exist for the relationship between spirituality at work's dimensions of meaningful work and alignment with organization values but no mediating effect occurs for the dimensions of sense of community and inner life.

Table 9 shows the results of emotional engagement as mediator between the four dimensions of spirituality at work of meaningful work, sense of community, alignment with organization values and inner life (i.e. independent variable or



“IV”) and **organizational citizenship behaviour – individual** (i.e. the dependent variable or “DV”).

**Table 9. Organizational citizenship behaviour - Individual (Mediator: Emotional Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
Organizational citizenship behaviour-Individual		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
	<b>Step 1: M on IV</b>	0.73***	0.54***	0.57***	0.49***
	<i>Control:</i>				
	Gender	-0.03	-0.07	-0.09	-0.12*
	Education	-0.05	-0.05	-0.08	-0.15**
	<b>Step 2: DV on IV</b>	0.24***	0.33***	0.34***	0.26***
	<i>Control:</i>				
	Gender	0.06	0.06	0.05	0.03
	Education	0.06	0.09	0.07	0.03
	<b>Step 3: DV on IV M</b>	0.05	0.24***	0.25***	0.16*
	<i>Control:</i>				
	Gender	0.25**	0.16*	0.14*	0.21***
	Gender	0.07	0.07	0.06	0.06
	Education	0.08	0.09	0.08	0.06
<b>Mediation Effect</b>		Full	Partial	Partial	Partial

Note: \*\*\* significant at  $P < 0.001$ ; \*\* significant at  $P < 0.01$ ; \*significant at  $P < 0.05$

For hypothesis 1b, all four dimensions of the spirituality at work are positively and significantly related to organizational citizenship behaviour – individual (as seen in Step 2). Thus, hypothesis 1b is fully supported. Spirituality at work is shown to be positively related to emotional engagement, as seen in Step 1. Thus, hypothesis 2b is fully supported. Finally, emotional engagement is shown to be positively and significantly related to organizational citizenship behaviour – individual (as seen in Step 3), supporting hypothesis 3b(ii) fully.

Further, as seen in column 1, emotional engagement is positively and significantly associated with meaningful work. Meaningful Work is also found to have a positive and significant relation with organizational citizenship behaviour – individual and this relation disappears in the presence of emotional engagement. Thus, full mediating effect is evident for the relationship between meaningful work with emotional engagement as the mediator and organizational citizenship behaviour – individual as the performance outcome.

In column 2, 3 and 4, on the other hand, emotional engagement is positively and significantly associated with sense of community, alignment of values and inner life. Sense of community, alignment with values and inner life, however, is not found to have a positive and significant relation with organizational citizenship behaviour – individual and thus, mediating effect is not found for the relationship between sense of community, alignment of values and inner life with emotional engagement as the mediator and organizational citizenship behaviour – individual as the performance outcome.

Thus, in conclusion, full mediation effect exist for the relationship between spirituality at work's dimensions of meaningful work and partial mediating effect occurs for the dimensions of sense of community, alignment of values and inner life.

Table 10 shows the results of emotional engagement as mediator between the four dimensions of spirituality at work of meaningful work, sense of community, alignment with organization values and inner life (i.e. independent variable or

“IV”) and **organizational citizenship behaviour – organization** (i.e. the dependent variable or “DV”).

**Table 10. Organizational citizenship behaviour - Organization (Mediator: Emotional Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
Organizational citizenship behaviour-Organization		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
	<b>Step 1: M on IV</b>	0.73***	0.54***	0.57***	0.49***
	<i>Control:</i>				
	Gender	-0.03	-0.07	-0.09	-0.12*
	Education	-0.05	-0.05	-0.08	-0.15**
	<b>Step 2: DV on IV</b>	0.11*	0.15*	0.16**	-0.02
	<i>Control:</i>				
	Gender	-0.01	-0.01	-0.02	-0.03
	Education	-0.16**	-0.15**	-0.16**	-0.17**
	<b>Step 3: DV on M</b>	-0.10	0.04	0.05	-0.16*
	<i>Control:</i>				
	Gender	0.29**	0.19**	0.19**	0.30***
	Education	-0.00	0.00	-0.00	0.01
		-0.15*	-0.14*	-0.15*	-0.13*
<b>Mediation Effect</b>		Full	Full	Full	No

Note: \*\*\* significant at  $P < 0.01$ ; \*\* significant at  $P < 0.05$ ; \*significant at  $P < 0.1$

For hypothesis 1c, the spirituality at work dimensions of meaningful work, sense of community and alignment with organization values are positively and significantly related to organizational citizenship behaviour - organization but not for the dimension of inner life (as seen in Step 2). Thus, hypothesis 1c is partially supported. Spirituality at work is shown to be positively related to emotional engagement, as seen in Step 1. Thus, hypothesis 2b is fully supported. Finally, emotional engagement is shown to be positively and significantly related to

organizational citizenship behaviour - organization (as seen in Step 3), supporting hypothesis 3b(iii) fully.

Further, as seen in column 1, 2 and 3, emotional engagement is positively and significantly associated with meaningful work, sense of community and alignment with organization values. Meaningful work, sense of community and organization values are also found to have a positive and significant relation with in-role behaviour and this relation disappears in the presence of emotional engagement. Thus, full mediating effect is evident for the relationship between meaningful work, sense of community and alignment with organization values with emotional engagement as the mediator and organizational citizenship behaviour - organization as the performance outcome.

In column 4, on the other hand, emotional engagement is positively and significantly associated with inner life. Inner life, however, is not found to have a positive and significant relation with in-role behaviour and thus, mediating effect is not found for the relationship between sense of community and inner life with emotional engagement as the mediator and organizational citizenship behaviour - organization as the performance outcome.

Thus, in conclusion, full mediation effect exist for the relationship between spirituality at work's dimensions of meaningful work, sense of community and alignment with organization values but no mediating effect occurs for the dimension of inner life.

Table 11 shows the results of emotional engagement as mediator between the four dimensions of spirituality at work of meaningful work, sense of community, alignment with organization values and inner life (i.e. independent variable or “IV”) and **creativity** (i.e. the dependent variable or “DV”).

**Table 11. Employee Creativity (Mediator: Emotional Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
Creativity	<b>Step 1: M on IV</b>	0.73***	0.54***	0.57***	0.49***
	<i>Control:</i>				
	Gender	-0.03	-0.07	-0.09	-0.12*
	Education	-0.05	-0.05	-0.08	-0.15**
	<b>Step 2: DV on IV</b>	0.31***	0.26***	0.32***	0.30***
	<i>Control:</i>				
	Gender	-0.14*	-0.15**	-0.16**	-0.17**
	Education	-0.12*	-0.11*	-0.12*	-0.16**
	<b>Step 3: DV on IV M</b>	-0.05	0.01	0.09	0.10
	<i>Control:</i>				
	Gender	0.50***	0.45***	0.41***	0.41***
	Education	-0.12*	-0.12*	-0.12*	-0.12*
<b>Mediation Effect</b>		Full	Full	Full	<b>Full</b>

Note: \*\*\* significant at  $P < 0.001$ ; \*\* significant at  $P < 0.01$ ; \*significant at  $P < 0.05$

For hypothesis 1d, all four dimensions of spirituality at work are positively and significantly related to creativity (as seen in Step 2). Thus, hypothesis 1d is fully supported. Spirituality at work is shown to be positively related to emotional engagement, as seen in Step 1. Thus, hypothesis 2b is fully supported. Finally, emotional engagement is shown to be positively and significantly related to creativity (as seen in Step 3), supporting hypothesis 3b(iv) fully.

Further, as seen in columns 1, 2, 3 and 4, emotional engagement is positively and significantly associated with all four dimensions of spirituality at work of meaningful work, sense of community, alignment of values and inner life. All four dimensions are also found to have a positive and significant relation with creativity and this relation disappears in the presence of emotional engagement. Thus, full mediating effect is evident for the relationship between meaningful work, sense of community, alignment with organization values and inner life with emotional engagement as the mediator and creativity as the performance outcome.

Thus, in conclusion, full mediation effect exist for the relationship between spirituality at work's four dimensions of meaningful work, sense of community and alignment with organization values and inner life.

#### **5.4.4 Discussion on the findings for Tables 8 – 11**

Tables 8 – 11 shows the regression results of the mediating effects of emotional engagement on the relationship between spirituality at work and performance. In summary for Table 8, the results show that full mediation exists between emotional engagement between meaningful work, alignment with organization values and in-role behaviour as expected.

No mediating effect, however, is found between sense of community, inner life and in-role behaviour. This is similar to the findings using physical engagement as the mediator. A possible reason could be that similarly, regardless of whether one seeks inner life or wants to be part of a community, to stay employed, they need to perform their formal job duties.

Table 10, shows full mediating effects of emotional engagement between meaningful work, sense of community and alignment with organization values and OCB - O. However, no mediating effect is shown for between inner life and OCB – O. This is also similar to the findings using physical engagement as the mediator and a likely explanation could be that inner life represents a person's hope and affects and impacts the self or individual more than that of the organization.

Table 9, however, shows full mediation effect of emotional engagement between meaningful work and OCB – I instead of partial mediation effect between physical engagement and the duo. The effects are stronger (i.e. full and not partial) perhaps because in emotional engagement, an individual is more able to be “authentic” (Kahn, 1992) and thus able to bring the full self to work if the work is believed and perceived as being very meaningful to the individual. Emotional engagement partially mediates the other three dimensions of spirituality at work and OCB – I.

Table 11 shows full mediation effect of emotional engagement on all dimensions of spirituality at work and creativity. Interestingly, the effect of emotional engagement as a mediator on creativity is the strongest as the rest of the physical and cognitive engagement is only a partial mediation effect. This can be attributed to the fact that in creativity, employees need to be able to think outside the box and thus will have to draw on their own resources. It is also often a choice by the employees of how well and how much effort they want to spend in coming up with a creative idea. Thus, when one has spirituality at work as a resource, one will view work as more meaningful and perhaps even be able to depend on co-

workers for help and be creative and develop better solutions to deal with the issues that organizations face. Also, with inner life, individuals may reflect more and thus have more thinking or feeling time to derive innovative solutions and ideas.



### 5.4.5 Cognitive engagement and its effects on spirituality at work and performance

The mediation relations of cognitive engagement between spirituality at work and performance are summarized in Figure 5 below.

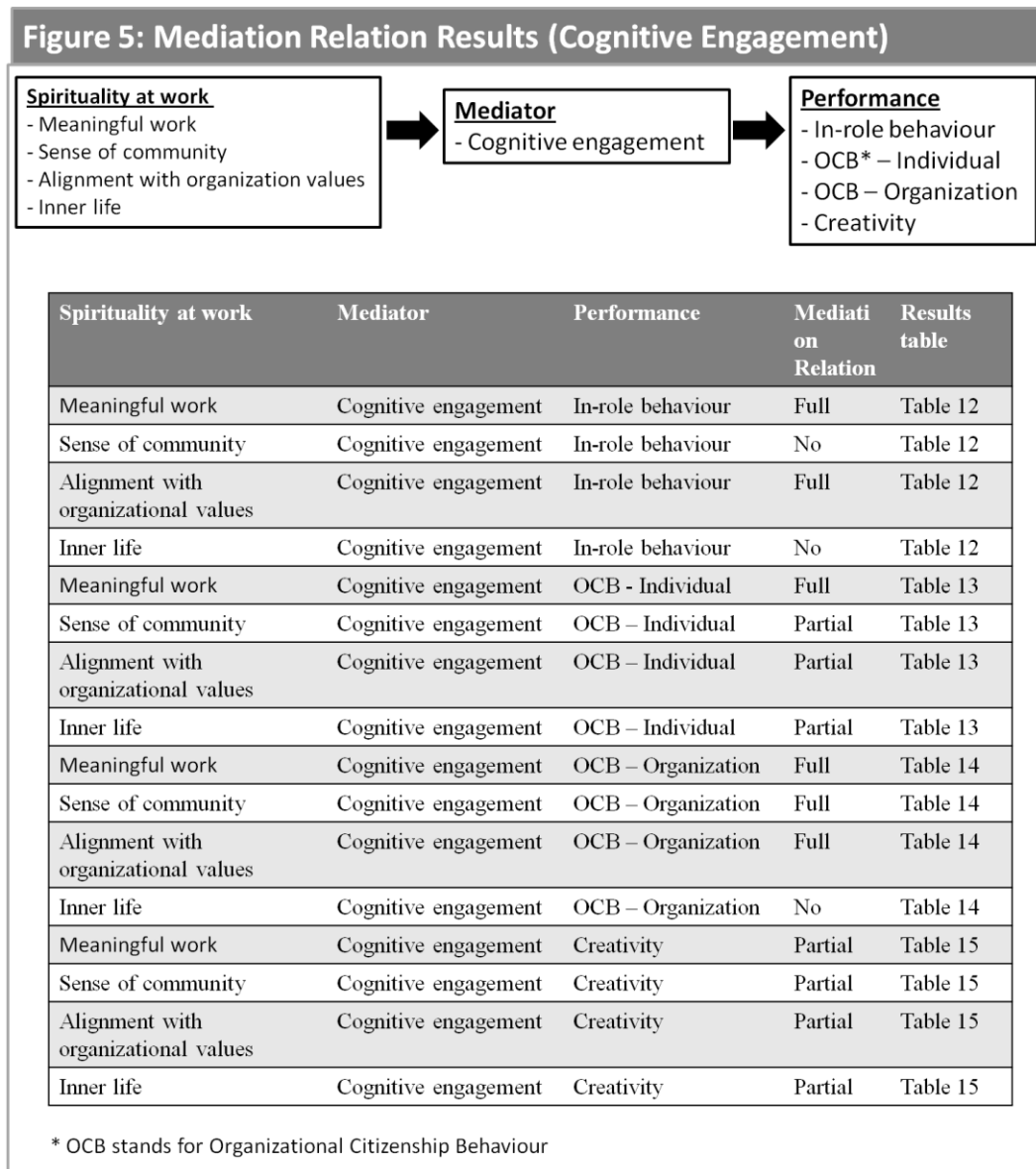


Table 12 shows the results of cognitive engagement as mediator between the four dimensions of spirituality at work of meaningful work, sense of community,

alignment with organization values and inner life (i.e. independent variable or “IV”) and **in-role behaviour** (i.e. the dependent variable or “DV”).

**Table 12. In-role behaviour (Mediator: Cognitive Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
In-role behavior		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
	<b>Step 1: M on IV</b>	0.37***	0.35***	0.41***	0.37***
	<i>Control:</i> Gender Education	-0.03 -0.10	-0.04 -0.09	-0.05 -0.11*	-0.07 -0.15**
	<b>Step 2: DV on IV</b>	0.14*	0.10	0.11*	0.05
	<i>Control:</i> Gender Education	-0.10 -0.27***	-0.11 -0.28***	-0.11* -0.28***	-0.11* -0.29***
	<b>Step 3: DV on IV M</b>	-0.02 0.41***	-0.05 0.43***	-0.07 0.43***	-0.12* 0.45***
	<i>Control:</i> Gender Education	-0.09 -0.23***	-0.09 -0.24***	-0.09 -0.23***	-0.08 -0.22***
	<b>Mediation Effect</b>	Full	No	Full	No

Note: \*\*\* significant at  $P < 0.001$ ; \*\* significant at  $P < 0.01$ ; \*significant at  $P < 0.05$

For hypothesis 1a, the spirituality at work dimensions of meaningful work and alignment with organization values are positively and significantly related to in-role behaviour but not for the dimensions of sense of community and inner life (as seen in Step 2). Thus, hypothesis 1a is partially supported. Spirituality at work is shown to be positively related to cognitive engagement, as seen in Step 1. Thus, hypothesis 2c is fully supported. Finally, cognitive engagement is shown to be positively and significantly related to in-role behaviour (as seen in Step 3), supporting hypothesis 3c(i) fully.

Further, as seen in column 1 and 3, cognitive engagement is positively and significantly associated with meaningful work and alignment with organization values. Meaningful Work and organization values are also found to have a positive and significant relation with in-role behaviour and this relation disappears in the presence of cognitive engagement. Thus, full mediating effect is evident for the relationship between meaningful work and alignment of values with cognitive engagement as the mediator and in-role behaviour as the performance outcome.

In column 2 and 4, on the other hand, cognitive engagement is positively and significantly associated with sense of community and inner life. Sense of community and inner life, however, is not found to have a positive and significant relation with in-role behaviour and thus, mediating effect is not found for the relationship between sense of community and inner life with cognitive engagement as the mediator and in-role behaviour as the performance outcome.

Thus, in conclusion, full mediation effect exist for the relationship between spirituality at work's dimensions of meaningful work and alignment with organization values but no mediating effect occurs for the dimensions of sense of community and inner life.

Table 13 shows the results of cognitive engagement as mediator between the four dimensions of spirituality at work of meaningful work, sense of community, alignment with organization values and inner life (i.e. independent variable or "IV") and **organizational citizenship behaviour – individual** (i.e. the dependent variable or "DV").

**Table 13. Organizational citizenship behaviour - Individual (Mediator: Cognitive Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
Organizational citizenship behaviour-Individual		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
	<b>Step 1: M on IV</b> <i>Control:</i> Gender Education	0.37*** -0.03 -0.10	0.35*** -0.04 -0.09	0.41*** -0.05 -0.11*	0.37*** -0.07 -0.15**
	<b>Step 2: DV on IV</b> <i>Control:</i> Gender Education	0.24*** 0.06 0.06	0.33*** 0.06 0.09	0.34*** 0.05 0.07	0.26*** 0.03 0.03
	<b>Step 3: DV on IV M</b> <i>Control:</i> Gender Education	0.11 0.35*** 0.07 0.10	0.22*** 0.32*** 0.07 0.11*	0.21*** 0.30*** 0.06 0.10*	0.13* 0.34*** 0.06 0.08
	<b>Mediation Effect</b>	<b>Full</b>	Partial	Partial	Partial

Note: \*\*\* significant at  $P < 0.001$ ; \*\* significant at  $P < 0.01$ ; \*significant at  $P < 0.05$

For hypothesis 1b, all four dimensions of the spirituality at work are positively and significantly related to organizational citizenship behaviour – individual (as seen in Step 2). Thus, hypothesis 1b is fully supported. Spirituality at work is shown to be positively related to cognitive engagement, as seen in Step 1. Thus, hypothesis 2c is fully supported. Finally, cognitive engagement is shown to be positively and significantly related to organizational citizenship behaviour – individual (as seen in Step 3), supporting hypothesis 3c(ii) fully.

Further, as seen in column 1, cognitive engagement is positively and significantly associated with meaningful work. Meaningful Work is also found to have a positive and significant relation with organizational citizenship behaviour –

individual and this relation disappears in the presence of cognitive engagement. Thus, full mediating effect is evident for the relationship between meaningful work with cognitive engagement as the mediator and organizational citizenship behaviour – individual as the performance outcome.

In column 2, 3 and 4, on the other hand, cognitive engagement is positively and significantly associated with sense of community, alignment of values and inner life. Sense of community, alignment with values and inner life, however, is not found to have a positive and significant relation with organizational citizenship behaviour – individual and thus, mediating effect is not found for the relationship between sense of community, alignment of values and inner life with cognitive engagement as the mediator and organizational citizenship behaviour – individual as the performance outcome.

Thus, in conclusion, full mediation effect exist for the relationship between spirituality at work's dimensions of meaningful work and partial mediating effect occurs for the dimensions of sense of community, alignment of values and inner life.

Table 14 shows the results of cognitive engagement as mediator between the four dimensions of spirituality at work of meaningful work, sense of community, alignment with organization values and inner life (i.e. independent variable or “IV”) and **organizational citizenship behaviour – organization** (i.e. the dependent variable or “DV”).

**Table 14. Organizational citizenship behaviour - Organization (Mediator: Cognitive Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
Organizational citizenship behaviour-Organization		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
	<b>Step 1: M on IV</b> <i>Control:</i> Gender Education	0.37*** -0.03 -0.10	0.35*** -0.04 -0.09	0.41*** -0.05 -0.11*	0.37*** -0.07 -0.15**
	<b>Step 2: DV on IV</b> <i>Control:</i> Gender Education	0.11* -0.01 -0.16**	0.15* -0.01 -0.15**	0.16** -0.02 -0.16**	-0.02 -0.03 -0.17**
	<b>Step 3: DV on IV M</b> <i>Control:</i> Gender Education	-0.02 0.36*** -0.00 -0.13*	0.03 0.34*** 0.00 -0.12*	0.02 0.35*** -0.00 -0.12*	-0.17** 0.42*** 0.00 -0.11*
<b>Mediation Effect</b>		Full	Full	Full	No

Note: \*\*\* significant at  $P < 0.001$ ; \*\* significant at  $P < 0.01$ ; \*significant at  $P < 0.05$

For hypothesis 1c, the spirituality at work dimensions of meaningful work, sense of community and alignment with organization values are positively and significantly related to organizational citizenship behaviour - organization but not for the dimension of inner life (as seen in Step 2). Thus, hypothesis 1c is partially supported. Spirituality at work is shown to be positively related to cognitive engagement, as seen in Step 1. Thus, hypothesis 2c is fully supported. Finally, cognitive engagement is shown to be positively and significantly related to organizational citizenship behaviour - organization (as seen in Step 3), supporting hypothesis 3c(iii) fully.

Further, as seen in column 1, 2 and 3, cognitive engagement is positively and significantly associated with meaningful work, sense of community and alignment with organization values. Meaningful work, sense of community and organization values are also found to have a positive and significant relation with organizational citizenship behaviour - organization and this relation disappears in the presence of cognitive engagement. Thus, full mediating effect is evident for the relationship between meaningful work, sense of community and alignment with organization values with cognitive engagement as the mediator and organizational citizenship behaviour - organization as the performance outcome.

In column 4, on the other hand, cognitive engagement is positively and significantly associated with inner life. Inner life, however, is not found to have a positive and significant relation with in-role behaviour and thus, mediating effect is not found for the relationship between sense of community and inner life with cognitive engagement as the mediator and organizational citizenship behaviour - organization as the performance outcome.

Thus, in conclusion, full mediation effect exist for the relationship between spirituality at work's dimensions of meaningful work, sense of community and alignment with organization values but no mediating effect occurs for the dimension of inner life.

Table 15 shows the results of cognitive engagement as mediator between the four dimensions of spirituality at work of meaningful work, sense of community,

alignment with organization values and inner life (i.e. independent variable or “IV”) and **creativity** (i.e. the dependent variable or “DV”).

**Table 15. Employee Creativity (Mediator: Cognitive Engagement)**

DV	Model	Independent Variable (Spirituality at Work)			
Creativity		Column 1: <u>Meaningful Work</u>	Column 2: <u>Sense of Community</u>	Column 3: <u>Alignment of Values</u>	Column 4: <u>Inner Life</u>
	<b>Step 1: M on IV</b>	0.37***	0.35***	0.41***	0.37***
	<i>Control:</i> Gender Education	-0.03 -0.10	-0.04 -0.09	-0.05 -0.11*	-0.07 -0.15**
	<b>Step 2: DV on IV</b>	0.31***	0.26***	0.32***	0.30***
	<i>Control:</i> Gender Education	-0.14* -0.12*	-0.15** -0.11*	-0.16** -0.12*	-0.17** -0.16**
	<b>Step 3: DV on IV M</b>	0.18** 0.35***	0.13* 0.38***	0.18** 0.34***	0.17** 0.35***
	<i>Control:</i> Gender Education	-0.13* -0.08	-0.13* -0.08	-0.14** -0.08	-0.15** -0.10*
<b>Mediation Effect</b>		Partial	Partial	Partial	Partial

Note: \*\*\* significant at  $P < 0.001$ ; \*\* significant at  $P < 0.01$ ; \*significant at  $P < 0.05$

For hypothesis 1d, all spirituality at work dimensions of meaningful work, sense of community, alignment of values and alignment with organization values are positively and significantly related to creativity (as seen in Step 2). Thus, hypothesis 1d is supported. Spirituality at work is shown to be positively related to cognitive engagement, as seen in Step 1. Thus, hypothesis 2c is fully supported. However, cognitive engagement is shown to be positively and significantly related to creativity (as seen in Step 3), supporting hypothesis 3c(iv) fully.



Further, as seen in columns 1, 2, 3 and 4, cognitive engagement is positively and significantly associated with all spirituality at work's dimensions of meaningful work, sense of community, alignment of values and alignment with organization values. All four dimensions are also found to have a positive and significant relation with creativity but this relation decreases in magnitude while still significant in the presence of cognitive engagement. Thus, partial mediating effect is evident for the relationship between the four dimensions of spirituality at work with cognitive engagement as the mediator and creativity as the performance outcome.

Thus, in conclusion, partial mediation effect exists for the relationship between all spirituality at work's dimensions of meaningful work, sense of community, alignment of values and alignment with organization values and inner life.

#### **5.4.6 Discussion on the Findings for Tables 12 – 15**

Tables 12 – 15 shows the regression results of the mediating effects of cognitive engagement on the relationship between spirituality at work and performance. In summary for Table 12, the results show that full mediation exists between cognitive engagement between meaningful work, alignment with organization values and in-role behaviour as hypothesized.

No mediation effect, however, is found between sense of community, inner life and in-role behaviour. This is similar to the findings of all three dimensions of engagement (i.e. physical engagement, emotional engagement and cognitive engagement as the mediator) and a possible explanation would be that similarly,

regardless of whether one seeks inner life or wants to be part of a community, to stay employed and for sustenance, they need to perform their formal job duties or risk getting fired.

Table 14 shows full mediating effects of cognitive engagement between meaningful work, sense of community and alignment with organization values and OCB - O. However, no mediating effect is shown for between inner life and OCB - O. This is also similar to the findings using all three dimensions of engagement (i.e. physical engagement, emotional engagement and cognitive engagement) as the mediator. Again, it could be because inner life affects the self and individual more than that of the organization.

Table 13 is similar to that of emotional engagement and shows full mediation effect of cognitive engagement between meaningful work and OCB - I instead of partial mediation effect between physical engagement and the duo. This could be because cognitive engagement is similar to emotional engagement, and thus, in cognitive engagement, an individual can display positive verbal behaviour and more likely to intellectualize more and be more involved. Consistent with the other two dimensions of engagement, cognitive engagement also partially mediates the other three dimensions of spirituality at work (i.e. sense of community, alignment of values and inner life) and OCB - I.

Table 15 shows partial mediating effects of cognitive engagement between all dimensions of spirituality at work and creativity, which is as expected. When one has spirituality at work as a result and thinks deeply like in cognitive engagement,

it seems likely that the individual will be able to be creative, albeit not as strongly as emotional engagement, where one feels authentic and thus better able to acknowledge their surroundings and thus be able to be more creative, as displayed through the full mediation effects of emotional engagement as a mediator between the four dimensions of spirituality at work and creativity.

#### **5.4.7 Concluding thoughts**

Overall, it is evident that there are indeed differences in the mediation effect of the three dimensions of engagement. Specifically, emotional engagement and cognitive engagement results in full mediation effects between meaningful work and OCB – I but only partial mediation effects on physical engagement as the mediator between meaningful work and OCB – I. This may imply that meaningful work may not work through physical engagement to lead to OCB – I. As OCB – I is more a discretionary behaviour, it is arguably logical to work through emotional and cognitive engagement.

Also, emotional engagement displayed a full mediation effect between all dimensions of spirituality at work and creativity but only a partial mediation effect is evident when physical engagement and cognitive engagement becomes the mediator.

In conclusion, the in-depth study of engagement in its three dimensions is an important one as it is evident from the results that emotional engagement explains more of the relationship between spirituality at work and performance outcomes, as compared to cognitive and physical engagement. For example, emotional

engagement explains fully why all dimensions of spirituality at work leads to creativity whereas it is only a partial mediation effect between all dimensions of spirituality at work and creativity through both physical and cognitive engagement as the mediator. The literature and practical implications will be discussed in the next chapter.

## **Chapter 6: Conclusion**

This study was conducted because of the observation that in today's competitive environment, organizations are under pressure to perform well and can do this only with competent workforce. Employees are thus under immense pressure and have been or have to start exhibiting behaviours that organizations desire. As expectations on employees' performance increases – since just doing one's duty is no longer enough – employees have to spend more time at work. With more time invested at work, leisure time decreases and some employees now have to seek happiness and passion from their work, instead of having hobbies or being affiliated to a club or religious community like those generations before.

A new awareness is now stirring the employees' soul such that they long to find meaning in work, have an inner life and seek to be able to find friends at work. They also strive to achieve more and thus, hope that their efforts are in line with corporate goals too. With this perspective, it seems that having spirituality at work will enable employees to be more connected to their work and in so doing, perform well.

Thus, this study is concerned with, through a theoretical model as presented in Chapter 3, looking into the mediating effects of work engagement between spirituality at work and performance outcomes desired by the organizations including in-role behaviour, OCB – I, OCB – O and creativity.

## **6.1 Discussion on the Theoretical Model**

The theoretical model links the spirituality at work dimensions of meaningful work, sense of community, alignment with organization values and inner life with the four performance outcomes of in-role behaviour, OCB – I, OCB – O and creativity through three dimensions of work engagement – physical, emotional and cognitive.

Results show that where physical engagement is the mediator, spirituality at work leads to outcomes that organizations desire if employees are physically engaged such that they are focused on their job and are in control. There is full or partial mediation effects of physical engagement between (a) meaningful work and alignment with organizational values to OCB – I, OCB – O and creativity; (b) all four dimensions of spirituality at work to all four dimensions of performance outcome; and (c) meaningful work, sense of community and alignment with organization values to in-role behaviour, OCB – I and creativity. Thus, in organizations that embraces spirituality at work, employees will develop physical engagement that will lead to performance outcomes because physically engaged employees feel competent and in control (Brown and Leigh, 1996 as cited in Rich et. al., 2010) and thus, leading to better performance at work through in-role behaviours, OCB – I, OCB – O and creativity.

Where emotional engagement is the mediator, spirituality at work similarly leads to outcomes that organizations desire if employees are emotionally engaged such that they feel they are fulfilling their psychological needs and values. There is full or partial mediation effects of emotional engagement between (a) meaningful

work and alignment with organizational values to OCB – I, OCB – O and creativity; (b) all four dimensions of spirituality at work to all four dimensions of performance outcome; and (c) meaningful work, sense of community and alignment with organization values to in-role behaviour, OCB – I and creativity. Thus, spirituality at work leads to performance outcomes if employees are emotionally engaged to their work because feeling that one is fulfilling their psychological needs can help individuals feel that the work is indeed worthwhile. Rego (2008) indeed found that when people experience workplace spirituality, they feel more affectively attached to their organizations, experience a sense of obligation/loyalty towards them, and feel less instrumentally committed and this helps them perform better at work, as demonstrated through in-role behaviours, OCB – I, OCB – O and creativity.

Finally, results show that where cognitive engagement is the mediator, spirituality at work also leads to outcomes that organizations desire if employees are cognitively engaged such that they identify themselves with their job. There is full or partial mediation effects of cognitive engagement between (a) meaningful work and alignment with organizational values to OCB – I, OCB – O and creativity; (b) all four dimensions of spirituality at work to all four dimensions of performance outcome; and (c) meaningful work, sense of community and alignment with organization values to in-role behaviour, OCB – I and creativity. Thus, spirituality at work leads to performance outcomes if employees are cognitively engaged to their work because being able to identify themselves with their work would help them see bigger purpose Kahn (1990) and perhaps, work becomes an extension of the person and thus, having cognitive engagement helps individuals perform better

at work, as demonstrated through in-role behaviours, OCB – I, OCB – O and creativity.

In the case of partial mediating effects, it can be noted that spirituality at work may even lead to performance outcomes directly, as is the case for: (a) physical engagement as a partial mediator between all dimensions of spirituality at work and OCB – I and creativity; (b) emotional engagement as a partial mediator between sense of community, alignment with organizational values and inner life with OCB – I; and (c) cognitive engagement as a partial mediator between sense of community, alignment with organizational values and inner life with OCB – I as well as between all dimensions of spirituality at work and creativity.

Results also revealed that all dimensions of work engagement by Kahn (1990) are not mediators between sense of community and inner life to in-role behaviours and that between inner life and OCB – O. Thus, sense of community need not work through work engagement to lead to in-role behaviours. Having a sense of community and thus connecting with others may be a personal choice that does not affect performance on the job. Also, inner life need not work through work engagement to lead to in-role behaviour and OCB – O. Inner life, according to Ashmos and Duchon (2000), is a state of mind, of hopefulness and awareness of personal values and may thus not affect performance on the job as they tend to be more technical and also, OCB – O since it benefits the organization directly instead of self-interest.



## **6.2 Limitations of Study**

### **6.2.1 Cross Sectional Nature**

The data was collected at the same point in time through surveys and thus does not consider differences in time. The key concern would be that placing reliance on such data may prevent the study from locating effects of causality.

Thus, in future, longitudinal data may be used to follow the subject's changes over time. If need be, panel data that combines both cross-sectional and longitudinal data may provide more clarity so as to examine changes in the difference variables over time and between different subjects.

### **6.2.2 Common Method Variance**

In this study, surveys are used as the single data collection method. According to Campbell and Fiske (1959), common method variance is due to the use of a specific method regardless of the construct of interest. This may cause a systematic measurement error and further bias the estimates of the true relationship among theoretical constructs.

However, researchers such as Spector (2006) concluded that this common method variance is indeed an urban legend and not the truth. The author argues that the popular position suggesting that the common variance method automatically affects variables measured with the same method is a distortion and oversimplification of the true state of affairs, reaching the status of urban legend.

In this study, the mode of measurement is by survey and perhaps, interview methods can be added for a more comprehensive measurement approach. This is because the study is based on a single self-report survey instrument and the highly personal nature of the subject spirituality at work may make it difficult to capture in a survey instrument.

### **6.3 Practical implications**

Increasing job resources through the four dimensions of spirituality at work (i.e. creating meaningful work, having a great sense of community at work, encouraging inner life and having employees' goals aligned with organization values) would lead to more engagement at work. In turn, more engagement will lead to better performance outcomes of in-role behaviours, OCB – I, OCB – O and creativity.

From the findings in this study, it is apparent that spirituality at work does have an important impact on performance outcomes, especially having meaningful work and having an alignment with organization values. Thus, these findings can be applied to different management streams such as organization leadership, executive coaching and organization learning and human resource management.

#### **6.3.1 Leadership**

The construct leadership also have many different definitions in the literature but one integrated definition is expressed by Yukl (2006) as a process whereby intentional influence is exerted by one person over other people to guide, structure and facilitate activities and relationships in a group or organization. Usually,

leaders influence follower's behaviour to create performance outcomes through psychological processes such as increasing engagement which is correlated to performance outcomes.

In the increasing globalized and complex world and with the changing expectations of the internet generation and knowledge worker, leaders play an important role in creating an environment that enables effective collaboration with a wide variety of stakeholders. Also, the increasing complexity places a need for leaders to be good at scanning and sensing the external environment for opportunities and threats. In order for leaders to perform their roles well, they should thus embrace the concepts of spirituality at work so that its effects can ripple through the organization. After all, leaders are often role models too! Followers do in fact have a strong desire and expectation of their leaders being authentic (Goffee and Jones, 2006). Thus, leaders should define clear roles and goals and ensure that their employees align their own goals with that of the organization's.

In our study, results show that having alignment of individuals' goals with that of the organization's will lead to engagement and desired performance outcomes! One tool to enable this is to articulate the organization's goals and values clearly. Another way can be to increase the use of employee stock options so that if the organization do well, employees stand to gain from the rise in stock values too, thus aligning interests.

Also, where leaders view their own work as meaningful, there may be a ripple effect that cascades throughout the organization. The leaders themselves will be engaged and this will help the organization as a whole embrace spiritual values and thus be engaged at work and produce great performance outcomes too. Such is the true power of leadership and that of walking the talk.

### **6.3.2 Executive Coaching and Organizational Learning**

Coaching, developing and facilitating learning still remain important functions of a leader (Yukl, 2006). Thus, an organization should invest resources to hire coaches for leaders and outstanding managers since doing so will help the leaders and managers clarify their thoughts and be more effective.

Coaching is a rich and complex field with a wide range of influences on disciplines such as philosophy, psychology, counselling, learning theory, change theory, etc. One of the key objectives of coaching is to help clients set goals and thus, organizations can use coaching as an effective tool to encourage spirituality at work through aligning the individuals' goals with that of the company's mission and vision. Also, coaching can help individuals feel more connected with themselves. Also, if individuals feel that the organizations take care of them through coaching, consistent with the findings by Llyod's (1990) book, as quoted in Poole (2009), that future organizations will have to be "nice" and also "imaginative, caring, sensitive and loving (p.225) such that not only will earnings per share ("EPS") increase, there will be enormously rich source of creative energy and commitment available to companies when they rise above a pure profit

motive. Thus, employees will feel more motivated to repay their organizations, often through discretionary efforts such as OCB – O.

Traditionally, coaching is offered only to senior executives but organizations could also train their managers (thus, organizational learning) on coaching skills so that they can in turn coach their direct reports and let them feel valued and encourage practicing spirituality at work. This new idea of not just providing coaching to senior executives and leaders but to managers can benefit the organization by enabling synchronized spirituality at work.

### **6.3.3 Organization Culture and Human Resource Management**

As mentioned in this study, organizations traditionally prioritize profits and despite being logical, it may backfire on their own performance. The focus in the literature is veering toward “people” corporate culture too. For example, Fawcett (2008) believes that organization cultures should be people-centered and should take on a spirit that is inspiring instead of limiting to be successful. This is an important shift in management because during the scientific management era, management tend to focus on technical rules to control employees but now, in the spirituality at work era, management has to rely on cultural and more humane rules to control the mind and soul of employees.

For example, in some companies, while trying to cut cost, contractors and part-time workers are brought in while permanent staff who are more expensive to keep, are being retrenched. Practices like that diminish spirituality at work because these contractors or part-time workers are unlikely to establish a sense of

community since their job is a transient one. These employees may also not find meaning in their work since to them, it is perhaps just a job and thus, they will not be engaged and performance outcomes desired by firms may not be reached, adversely affecting firm performance. Thus, it is critical to treat workers as an end itself rather than just means to an end.

By taking care of the most important asset of organizations – its people – the organization is more likely to succeed in having spirituality at work that will lead to engaged employees and eventually to better organization performance. For example, if and where employees need to arrange for flexible working hours due to family commitments, organizations in the new age must be able to support. This will reduce attrition and employees will feel that they are valued. Treating employees kindly will then elicit a sense of reciprocity such that employees may feel more supported and find greater meaning in work, leading to being more engaged employees, translating not just to higher profits but an enormously rich source of creative energy and commitment by employees (Llyod, 1990 as cited in Poole, 2009).

It is important to note, however, that culture is a form of lived experience with very different interpretations and understandings by employees. Thus, it is plausible to conclude that managers can never fully control it to produce a common meaning. However, managers are compelled to have to try (Long and Mills, 2010). To further ensure that organization culture is more “common” and consistent, managers can perhaps rely on two of the key functions of Human Resources - recruitment and compensation. It helps to screen candidates for

spirituality values if the organizations want to have a culture of having spirituality at work. Thus, recruiting officers can ask specific questions on why the individual would choose to apply for a position in the organization, what would be his or her personal goals and aspirations and see if the job role and progression are consistent. Also, it helps if the individual's values and goals are aligned with that of the organizations' from the start. Thus, right from selection and recruitment, an organization should already look out for people who embrace spirituality at work values.

Further, a company's induction or orientation programme must clearly articulate the organization's culture of spirituality at work and organization values. Afterall, some authors did claimed that corporate culture could be used to control employees' mind where they are forced to adhere to corporate values and converge instead of being left free to understand their own reality and explore other alternatives present (Long and Mills, 2010).

Where compensation is concerned, the old adage of what gets measured gets done applies. Thus, in the individual's job objectives, the organization may want to include an element of whether the individuals practice spirituality at work values and use the element to determine promotional, pay increment or bonuses. Thus, if an organization wants to encourage employees working together well since having a sense of community can lead to some performance outcomes, an element of "how well the employees work with others" can be one of the evaluation criteria that the line managers or human resource can use or rely on when evaluating the

employee's performance. This would encourage spirituality at work and hopefully, benefiting both the employees and organizations.

Finally, organizations do sometimes adopt certain charitable causes. For example, working with the blind or with children with cleft lips, etc. These charitable actions may also help make individuals feel that they have meaning in their work as at the same time, they can contribute to the community that they live in. Thus, organizations can use community work as another tool to help employees feel that they can achieve spirituality at work.

#### **6.4 Future research**

This study focuses on the positive effects of spirituality at work. It will be interesting for future research to see if there are potential negative effects from having spirituality at work. This is because of the observation that the literature focuses on the positive outcomes of spirituality at work such organizational performance, productivity and profitability (e.g. Neck and Milliman, 1994; Lloyd, 1990). However, there is room for researchers to study the potential that having spirituality at work could result in employees ignoring the negative effects on their health, family and community. Also, in the extreme case where people spend a significant amount of time at work due to being engaged employees, sometimes, they can work themselves to death – literally. In Japan, the term “*Karoshi*” was coined to describe death from overwork. In the literature, *Karoshi* is defined as a sudden death due to cardiovascular and cerebrovascular disease (Nishiyama and Johnson, 1997). Thus, there exist negative outcomes from having spirituality at



work as spirited and engaged employees may tend to invest more hours at work (since they see work as meaningful) and this can be studied further.

Moving on, researchers can perhaps explore other dimensions of spirituality at work to examine if dimensions such as “transcendence” can lead to performance outcomes. This is because in reviewing the various definitions of spirituality at work in the literature, it was noted that spirituality at work was defined as “transcendence” (e.g. Shafranske and Gorsuch, 1984; Mauritzen, 1988, etc) and “ultimate” (e.g. Tart, 1975; Wong, 1998) but later, while “ultimate” falls out of fashion and not used in the definition of spirituality at work, “transcendence” was once again resurrected (i.e. Karakas, 2010; Chamiec-Case, 2009).

Thus, it may be interesting to see if the dimension of transcendence can lead to performance outcomes through work engagement as a mediator. In support of using transcendence as a spirituality at work dimension, Conger (1994) suggested that self transcendence can help create a workplace where individuals view themselves as being able to fulfil a higher purpose and building a sense of community.

Besides transcendence, there is another concept that may also potentially be a dimension of spirituality at work and it is self-actualization. Maslow (1961) wrote: “The goal of identity (self actualization, autonomy, individuation, Horney’s real self, authenticity, etc) seems to be simultaneously an end-goal in itself, and also a transitional goal, a rite of passage, a step along the path to the transcendence of identity (pp. 260)”.

According to Neck and Milliman (1994), the goal of spirituality at work is to be able to reach one's full potential and to have positive attitudes and relationships with the world. Maslow's concept of the highest stage of human development, self-actualization is therefore, quite similar to the existing literature on spirituality at work. Future research can thus focus on the influence and impact of self-actualization on performance outcomes.

Future studies can also explore and reconcile on whether “transcendence” coincides with self-actualization. In Maslow’s attempt to transcend the dichotomy between self-actualization and self-transcendence, he wrote (Maslow, 1967, pp.113): “The spiritual life ... is part of the Real Self ... to the extent that pure expressing of oneself, or pure spontaneity, is possible, to that extent will the meta-needs also be expressed.” Thus, it will be interesting to explore the difference between the two similar constructs and whether, as separate dimensions of spirituality at work, will they also lead to positive performance outcomes.

In summary thus, more dimensions of spirituality at work can be studied to gain a deeper understanding of our construct. Importantly, rather than just evaluating the positive performance outcomes, it will be even more intriguing to see if spirituality at work can lead to negative outcomes. Such will be a good contribution to the literature.

Finally, in the course of this study, I find that there may be other variables that may affect the respective dimensions of spirituality at work. For example, how and when would employees feel that they have meaningful work? Or when would

they feel that they have a sense of community. Thus, variables such as organization vision, mission and goals, leadership or even the individual's personal attributes such as altruism, optimism, etc. may come into play to affect whether employees will feel that they have spirituality at work. In fact, Tepper (2003) found that some psychological states lead to spirituality at work (i.e. gratefulness, sensitivity to others' needs and tolerance for inequality). Thus, further research may want to look into the variables that could affect spirituality at work. The focus has been on shifting the culture such that it is More scope thus exists and this research area has direct practical implications as discussed above.

## References

- Abraham, M. 1954. Motivation and personality. **Nueva York: Harper and Row.**
- Adams, J. S. 1965. Inequity in social exchange. **Advances in experimental social psychology**, 2(267-299).
- André, L. D., and Delbecq, A. L. 1999. Christian spirituality and contemporary business leadership. **Journal of Organizational Change Management**, 12(4): 345.
- Armstrong, T. D. 1995. Exploring spirituality: The development of the Armstrong measure of spirituality, **American Psychological Association**. New York.
- Arnold, B. B., and Evangelia, D. 2008. Towards a model of work engagement. **Career Development International**, 13(3): 209-223.
- Ashforth, B. E., and Pratt, M. G. 2003. Institutionalized spirituality. **Handbook of workplace spirituality and organizational performance**: 93–107.
- Ashmos, D. P., and Duchon, D. 2000. Spirituality at work: A conceptualization and measure. **Journal of Management Inquiry**, 9(2): 134-145.
- Babcock-Roberson, M. E., and Strickland, O. J. 2010. The Relationship Between Charismatic Leadership, Work Engagement, and Organizational Citizenship Behaviors. **Journal of Psychology**, 144(3): 313-326.
- Bakker, A. B., Albrecht, S. L., and Leiter, M. P. 2011. Work engagement: Further reflections on the state of play. **European Journal of Work and Organizational Psychology**, 20(1): 74-88.
- Bakker, A. B., and Bal, P. M. 2010. Weekly work engagement and performance: A study among starting teachers. **Journal of Occupational and Organizational Psychology**, 83(1): 189-206.
- Bakker, A. B., and Demerouti, E. 2007. The job demands-resources model: State of the art. **Journal of Managerial Psychology**, 22(3): 309-328.
- Bakker, A. B., and Demerouti, E. 2008. Towards a model of work engagement. **Career Development International**, 13(3): 209-223.
- Bakker, A. B., Demerouti, E., de Boer, E., and Schaufeli, W. B. 2003. Job demands and job resources as predictors of absence duration and frequency\* 1. **Journal of Vocational Behavior**, 62(2): 341-356.
- Bakker, A. B., Demerouti, E., and Dollard, M. F. 2008. How Job Demands Affect Partners' Experience of Exhaustion: Integrating Work-Family Conflict and Crossover Theory. **Journal of Applied Psychology**, 93(4): 901-911.
- Bakker, A. B., Demerouti, E., and Schaufeli, W. B. 2003. Dual processes at work in a call centre: An application of the job demands - resources model. **European Journal of Work and Organizational Psychology**, 12(4): 393-417.
- Bakker, A. B., Demerouti, E., and Schaufeli, W. B. 2005. The crossover of burnout and work engagement among working couples. **Human Relations**, 58(5): 661.
- Bakker, A. B., Demerouti, E., Taris, T. W., Schaufeli, W. B., and Schreurs, P. J. G. 2003. A multigroup analysis of the job demands-resources model in four home care organizations. **International Journal of Stress Management**, 10(1): 16-38.
- Bakker, A. B., Demerouti, E., and Verbeke, W. 2004. Using the job demands-resources model to predict burnout and performance. **Human Resource Management**, 43(1): 83-104.
- Bakker, A. B., Emmerik, H., and Euwema, M. C. 2006. Crossover of burnout and engagement in work teams. **Work and Occupations**, 33(4): 464.
- Bakker, A. B., Hakanen, J. J., Demerouti, E., and Xanthopoulou, D. 2007. Job resources boost work engagement, particularly when job demands are high. **Journal of Educational Psychology**, 99(2): 274-284.

- Bakker, A. B., Leiter, M. P. 2010. ***Work engagement: A handbook of essential theory and research***. : New York, NY, US: Psychology Press.
- Bakker, A. B., Schaufeli, W. B., Leiter, M. P., and Taris, T. W. 2008. Work engagement: An emerging concept in occupational health psychology. ***Work and Stress***, 22(3): 187-200.
- Bakker, A. B., van Emmerik, H., and Euwema, M. C. 2006. Crossover of Burnout and Engagement in Work Teams. ***Work and Occupations***, 33(4): 464-489.
- Balu, G. J. 1986. Job Involvement and Organizational Commitment as Interactive Predictors of Tardiness and Absenteeism. ***Journal of Management***, 12(4): 577.
- Baron, R. M., and Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. ***Journal of Personality and Social Psychology***, 51(6): 1173-1182.
- Bateman, T. S., and Organ, D. W. 1983. Job satisfaction and the good soldier: The relationship between affect and employee" citizenship". ***Academy of management Journal***, 26(4): 587-595.
- Bell, E., and Taylor, S. 2003. The elevation of work: Pastoral power and the new age work ethic. ***Organization***, 10(2): 329.
- Benner, D. G. 1989. Toward a psychology of spirituality: Implications for personality and psychotherapy. . ***Journal of Psychology and Christianity***, 5: 19-30.
- Benner, D. G. 1998. Care of souls: Revisioning Christian nurture and counsel. ***Grand Rapids, MI: Baker Books***.
- Bierly, P. E., III, Kessler, E. H., and Christensen, E. W. 2000. Organizational learning, knowledge and wisdom. ***Journal of Organizational Change Management***, 13(6): 595-595-618.
- Blustein, D. L. 2006. ***The psychology of working: A new perspective for career development, counseling, and public policy***: Lawrence Erlbaum.
- Borman, W. C., and Motowidlo, S. J. 1997. Task Performance and Contextual Performance: The Meaning for Personnel Selection Research. ***Human Performance***, 10(2): 99.
- Borman, W. C., Motowidlo, S.J. 1993. ***Expanding the criterion domain to include elements of contextual performance***: San Francisco: Jossey-Bass.
- Bregman, L., and Thierman, S. 1995. ***First person mortal: Personal narratives of illness, dying, and grief***: New York: Paragon.
- Brown, S. P., and Leigh, T. W. 1996. A new look at psychological climate and its relationship to job involvement, effort, and performance. ***Journal of Applied Psychology***, 81(4): 358-368.
- Bulger, C. A., Matthews, R. A., and Hoffman, M. E. 2007. Work and personal life boundary management: Boundary strength, work/personal life balance, and the segmentation-integration continuum. ***Journal of Occupational Health Psychology***, 12(4): 365.
- Burack, E. H. 1999. Spirituality in the workplace. ***Journal of Organizational Change Management***, 12(4): 280-291.
- Burke, R. J. 2009. Working to Live or Living to Work: Should Individuals and Organizations Care? ***Journal of Business Ethics***, 84: 167-172.
- Buunk, B. P., Ybema, J. F., Van Der Zee, K., Schaufeli, W. B., and Gibbons, F. X. 2001. Affect Generated by Social Comparisons Among Nurses High and Low in Burnout. ***Journal of Applied Social Psychology***, 31(7): 1500-1520.
- Campbell, D. T., and Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. ***Psychological bulletin***, 56(2), 81.

- Campion, M. A., Medsker, G. J., and Higgs, A. C. 1993. RELATIONS BETWEEN WORK GROUP CHARACTERISTICS AND EFFECTIVENESS: IMPLICATIONS FOR DESIGNING EFFECTIVE WORK GROUPS. *Personnel Psychology*, 46(4): 823-850.
- Canda, E. a. F., L. 1999. *Spiritual Diversity in Social Work Practice: The Heart of Helping*: New York: Free Press.
- Carmeli, A., and Spreitzer, G. M. 2009. Trust, connectivity, and thriving: Implications for innovative behaviors at work. *The Journal of Creative Behavior*, 43(3): 169-191.
- Carr, D. 1997. The Fulfillment of Career Dreams at Midlife: Does It Matter for Women's Mental Health? *Journal of Health and Social Behavior*, 38(4): 331-344.
- Case, P., Gosling, J. 2010. Where is the wisdom we have lost in knowledge? A stoical perspective on personal knowledge management, *Personal Knowledge Management*: Oxford: Gower.
- Cavanagh, G. F. 1999. Spirituality for managers: Context and critique. *Journal of Organizational Change Management*, 12(3): 186-199.
- Challenges, E. 2008. Spirituality at Work. *Journal for Quality and ParticiPaTion*: 24.
- Chamiec-Case, R. 2009. Developing a Scale to Measure Social Workers' Integration of Spirituality in the Workplace. *Journal of Religion and Spirituality in Social Work: Social Thought*, 28(3): 284-305.
- Chandler, C. K., Holden, J. M., and Kolander, C. A. 1992. Counseling for Spiritual Wellness: Theory and Practice. *Journal of Counseling and Development*, 71(2): 168-175.
- Christian, M. S., Garza, A. S., and Slaughter, J. E. 2011. WORK ENGAGEMENT: A QUANTITATIVE REVIEW AND TEST OF ITS RELATIONS WITH TASK AND CONTEXTUAL PERFORMANCE. *Personnel Psychology*, 64(1): 89-136.
- Cohn, M. A., Fredrickson, B. L., Brown, S. L., Mikels, J. A., and Conway, A. M. 2009. Happiness unpacked: Positive emotions increase life satisfaction by building resilience. *Emotion*, 9(3): 361-368.
- Conger, J. A. 1994. *Spirit at work: Discovering the spirituality in leadership*: Jossey-Bass San Francisco.
- Chong, W. N. 2011. The Influence of pro-creativity leadership on employee creativity: Examining the medating effects of intrinsic motivation, organization-based self-esteem, and climate for innovation. Unpublished Masters Thesis. Lee Kong Chian School of Business, Singapore Management University.
- Connolly, K. M., and Myers, J. E. 2003. Wellness and mattering: The role of holistic factors in job satisfaction. *JOURNAL OF EMPLOYMENT COUNSELLING*, 40(4): 152-160.
- Cowling, M. 2005. Still at work? *An Empirical Test of Competing Theories of the Long-Hours Culture*.
- Dale, E. S. 1991. *Bringing heaven down to earth: A practical spirituality of work*: New York: Peter Lang.
- Daniels, M. 1982. The development of the concept of self-actualization in the writings of Abraham Maslow. *Current Psychological Reviews*, 2(1): 61-75.
- Daniels, M. 2001. Maslow's concept of self-actualization. Retrieved from <http://www.mdani.demon.co.uk/archive/MDMaslow.htm>.
- De Lange, A. H., De Witte, H., and Notelaers, G. 2008. Should I stay or should I go? Examining longitudinal relations among job resources and work engagement for stayers versus movers. *Work and Stress*, 22(3): 201-223.
- Deci, E. L., and Ryan, R. M. 1985. *Intrinsic motivation and self-determination in human behavior*: New York: Plenum Press.
- Deci, E. L., and Ryan, R. M. 1985. *Intrinsic motivation and self-determination in human behavior*: Springer.

- Deci, E. L., and Ryan, R. M. 2000. The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological inquiry*, 11(4): 227-268.
- Dehler, G. E., and Welsh, M. A. 1994. Spirituality and Organizational Transformation. *Journal of Managerial Psychology*, 9(6): 17.
- Dehler, G. E., and Welsh, M. A. 2003. The experience of work: spirituality and the new workplace. *Handbook of workplace spirituality and organizational performance*: 108-122.
- Delgado, C. 2005. A discussion of the concept of spirituality. *Nursing Science Quarterly*, 18(2): 157.
- Demerouti, E., and Cropanzano, R. 2009. From thought to action: Employee work engagement and job performance. *Psychology Press, New York*.
- Dent, E. B., Higgins, M. E., and Wharff, D. M. 2005. Spirituality and leadership: An empirical review of definitions, distinctions, and embedded assumptions. *The Leadership Quarterly*, 16(5): 625-653.
- Diener, E., Suh, E. M., Lucas, R. E., and Smith, H. L. 1999. Subjective well-being: Three decades of progress. *Psychological bulletin*, 125: 276-302.
- Diener, E. D., Emmons, R. A., Larsen, R. J., and Griffin, S. 1985. The satisfaction with life scale. *Journal of Personality assessment*, 49(1): 71-75.
- Doe, S. S. 2004. Spirituality-Based Social Work Values for Empowering Human Service Organizations. *Journal of Religion and Spirituality in Social Work*, 23(3): 45-66.
- Dooley, D. 2003. Unemployment, underemployment, and mental health: Conceptualizing employment status as a continuum. *American Journal of Community Psychology*, 32(1): 9-20.
- Duchon, D., and Plowman, D. A. 2005. Nurturing the spirit at work: Impact on work unit performance. *Leadership Quarterly*, 16(5): 807-833.
- Elkins, D. N., Hedstrom, L. J., Hughes, L. L., Leaf, J. A., and Saunders, C. 1988. Toward a humanistic-phenomenological spirituality. *Journal of Humanistic Psychology*, 28(4): 5.
- Emblen, J. D. 1992. Religion and spirituality defined according to current use in nursing literature. *Journal of Professional Nursing*, 8(1): 41-47.
- Emmons, R. A. 2000. Is Spirituality an Intelligence? Motivation, Cognition, and the Psychology of Ultimate Concern. *International Journal for the Psychology of Religion*, 10(1): 3-26.
- Engelbrecht, S. 2006. Motivation and burnout in human service work: the case of midwifery in Denmark: Roskilde University, Roskilde.
- Epps, J. 1995. Respiring organizations. *JOURNAL FOR QUALITY AND PARTICIPATION*: 40-40.
- Fawcett, S., Brau, J., Rhoads, G., Whitlark, D., and Fawcett, A. 2008. Spirituality and Organizational Culture: Cultivating the ABCs of an Inspiring Workplace. *International Journal of Public Administration*, 31(4): 420-438.
- Feldman, D. C. 2002. Managers' propensity to work longer hours:: A multilevel analysis. *Human Resource Management Review*, 12(3): 339-357.
- Fleming, J. H., and Asplund, J. 2007. Customer Satisfaction: A Flawed Measure: 1: Gallup Poll News Service.
- Fredrickson, B. L. 2001. The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3): 218-226.
- Frese, M., Fay, D., Hilburger, T., Leng, K., and Tag, A. 1997. The concept of personal initiative: Operationalization, reliability and validity in two German samples. *Journal of Occupational and Organizational Psychology*, 70(2): 139-161.

- Fuller, R. 2001. ***Spiritual, but not religious: Understanding unchurched America***. USA: Oxford University Press.
- Geh, E. 2009. A Study of the Effects of Mediators between Spirituality at Work and Organizational Citizenship Behaviors. Unpublished Masters Thesis. Lee Kong Chian School of Business, Singapore Management University.
- Geh, E., and Tan, G. 2009. Spirituality at work in a changing world: managerial and research implications. ***Journal of Management, Spirituality and Religion***, 6(4): 287-300.
- Giacalone, R. A., and Jurkiewicz, C. L. 2005. ***Handbook of workplace spirituality and organizational performance***: ME Sharpe Inc.
- Giacalone, R. A. J., C. L. 2003. Toward a science of workplace spirituality, ***Handbook of workplace spirituality and organizational performance***: 3-28: New York: M.E. Sharpe, Armonk
- Gibson, C. B., Porath, C. L., Benson, G. S., and Lawler III, E. E. 2007. What results when firms implement practices: The differential relationship between specific practices, firm financial performance, customer service, and quality. ***Journal of Applied Psychology***, 92(6): 1467.
- Gilson, L. L., and Shalley, C. E. 2004. A Little Creativity Goes a Long Way: An Examination of Teams' Engagement in Creative Processes. ***Journal of Management***, 30(4): 453-470.
- Gladstein, D. L. 1984. Groups in Context: A Model of Task Group Effectiveness. ***Administrative Science Quarterly***, 29(4): 499-517.
- Goffee, R., and Jones, G. (2006). *Why should anyone be led by you?: what it takes to be an authentic leader*: Harvard Business Press.
- Gough, H. G. 1979. A creative personality scale for the Adjective Check List. ***Journal of Personality and Social Psychology***, 37(8): 1398-1405.
- Gro Ellen, M., and Stale, E. 2004. A Review of Instruments Assessing Creative and Innovative Environments Within Organizations. ***Creativity Research Journal***, 16(1): 119-140.
- Guttman, L. 1954. An outline of some new methodology for social research. ***Public Opinion Quarterly***, 18(4): 395.
- Guzzo RA, S. G. 1992. Group performance and intergroup relations in organizations, ***Handbook of Industrial and Organizational Psychology***: Palo Alto, CA: Consult. Psychol. Press.
- Hackman, J. R., and Oldham, G. R. 1976. Motivation through the design of work: test of a theory\* 1. ***Organizational behavior and human performance***, 16(2): 250-279.
- Hackman, J. R. a. O., G.R. 1980. ***Work redesign***: MA: Addison-Wesley.
- Hakanen, J. J., Perhoniemi, R., and Toppinen-Tanner, S. 2008. Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. ***Journal of Vocational Behavior***, 73(1): 78-91.
- Hakanen, J. J., Schaufeli, W. B., and Ahola, K. 2008. The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. ***Work and Stress***, 22(3): 224-241.
- Halbesleben, J. R. B. 2006. Sources of social support and burnout: A meta-analytic test of the conservation of resources model. ***Journal of Applied Psychology***, 91(5): 1134-1145.
- Halbesleben, J. R. B., and Bowler, W. M. 2007. Emotional exhaustion and job performance: The mediating role of motivation. ***Journal of Applied Psychology***, 92(1): 93.



- Hall, D. T., and Mirvis, P. H. 1996. The new protean career: Psychological success and the path with a heart. ***DT Hall and Associates, The career is dead—long live the career: A relational approach to careers. San Francisco: Jossey-Bass***: 15-45.
- Harter, J. K., Schmidt, F. L., and Hayes, T. L. 2002. Business-Unit-Level Relationship Between Employee Satisfaction, Employee Engagement, and Business Outcomes: A Meta-Analysis. ***Journal of Applied Psychology***, 87(2): 268-279.
- Hawley, J. 1993. ***Reawakening the Spirit in Work: The Power of Dharmic Management***: Berrett-Koehler Publishers, San Francisco, CA.
- Haynes, C. J. 2009. Holistic human development. ***Journal of Adult Development***, 16(1): 53-60.
- Heaton, D. P., Schmidt-Wilk, J., and Travis, F. 2004. Constructs, methods, and measures for researching spirituality in organizations. ***Journal of Organizational Change Management***, 17(1): 62-82.
- Herzberg, F., Mausner, B. and Snyderman, B.B. 1959. ***The motivation to work***: New York: Wiley.
- Higgs, M., and Dulewicz, V. (2002). *Making sense of emotional intelligence* (Vol. 2): National Foundation for Educational Research.
- Hill, P. C., and Pargament, K. I. 2003. Advances in the conceptualization and measurement of religion and spirituality. ***American psychologist***, 58(1): 64-74.
- Hobfoll, S. E. 2001. The influence of culture, community, and the nested self in the stress process: advancing conservation of resources theory. ***Applied Psychology***, 50(3): 337-421.
- Hochschild, A. R. 1997. The time bind. ***New York: Henry Holt***.
- Homans, G. C. 1958. Social behavior as exchange. ***American journal of sociology***, 63(6): 597-606.
- Hong, Y. J. 2011. Developing a New Human Services Management Model Through Workplace Spirituality in Social Work. ***Journal of Workplace Behavioral Health***, 26(2): 144-163.
- Hoyle, R. H., Stephenson, M. T., Palmgreen, P., Lorch, E. P., and Donohew, R. L. 2002. Reliability and validity of a brief measure of sensation seeking. ***Personality and Individual Differences***, 32(3): 401-414.
- Jabri, M. M. 1991. The Development of Conceptually Independent Subscales in the Measurement of Modes of Problem Solving ***Educational and Psychological Measurement***, 51(4): 975-983.
- Jacques, R. 1996. ***Manufacturing the Employee***: London, Sage.
- James, K., Brodersen, M., and Eisenberg, J. 2004a. Workplace Affect and Workplace Creativity. ***Human Performance***, 17(2): 169-194.
- James, K., Brodersen, M., and Eisenberg, J. 2004b. Workplace affect and workplace creativity: A review and preliminary model. ***Human Performance***, 17(2): 169-194.
- James, K., Clark, K., and Cropanzano, R. 1999. Positive and Negative Creativity in Groups, Institutions, and Organizations: A Model and. ***Creativity Research Journal***, 12(3): 211.
- Jeffrey, J. S. R. R., Irving, I. M. L. L., and Dirk, D. D. S. S. 1991. A Current Look at the Job Satisfaction/Life Satisfaction Relationship: Review and Future Considerations. ***Human Relations***, 44(3): 287-307.
- Jerry, B., Biberman, J., Michael, W., Whitty, M., Lee, R., and Robbins, L. 1999. Lessons from Oz: balance and wholeness in organizations. ***Journal of Organizational Change Management***, 12(3): 243.
- Jerry, B., and Michael, W. 1997. A postmodern spiritual future for work. ***Journal of Organizational Change Management***, 10(2): 130.

- Johnson, A. L. 2007. Mary Parker Follett: Laying the foundations for spirituality in the workplace. *International Journal of Public Administration*, 30(4): 425-439.
- Judge, T. A., and Bono, J. E. 2001. Relationship of Core Self-Evaluations Traits—Self-Esteem, Generalized Self-Efficacy, Locus of Control, and Emotional Stability—With Job Satisfaction and Job Performance: A Meta-Analysis. *Journal of Applied Psychology*, 86(1): 80-92.
- Judge, T. A., Locke, E. A., and Durham, C. C. 1997. THE DISPOSITIONAL CAUSES OF JOB SATISFACTION: A CORE EVALUATIONS APPROACH. *Research in Organizational Behavior*, 19: 151.
- Juntunen, C. L. 2006. The psychology of working: The clinical context. *Professional Psychology: Research and Practice*, 37(4): 342-350.
- Kühnel, J., Sonnentag, S., and Westman, M. 2009. Does work engagement increase after a short respite? The role of job involvement as a double-edged sword. *Journal of Occupational and Organizational Psychology*, 82(3): 575-594.
- Kahn, W. A. 1990. Psychological conditions of personal engagement and disengagement at work. *Academy of management Journal*, 33(4): 692-724.
- Kahn, W. A. 1992. To be fully there: Psychological presence at work. *Human Relations*, 45(4): 321.
- Karakas, F. 2010. Spirituality and Performance in Organizations: A Literature Review. *Journal of Business Ethics*, 94(1): 89-106.
- Katz, D. a. K., R. 1966. *The social psychology of organizations*: New York: Wiley.
- Keyes, C. L. M., and Waterman, M. B. 2003. Dimensions of well-being and mental health in adulthood. *Well-being: Positive development across the life course*: 477-497.
- Kinjerski, V. M., and Skrypnik, B. J. 2004. Defining spirit at work: finding common ground. *Journal of Organizational Change Management*, 17(1): 26-42.
- Konz, G. N. P., and Ryan, F. X. 1999. Maintaining an organizational spirituality: no easy task. *Journal of Organizational Change Management*, 12(3): 200.
- Korac-Kakabadse, N., Korac-Kakabadse, A., and Kouzmin, A. 1999. Dysfunctionality in "citizenship" behaviour in decentralized organizations. *Journal of Managerial Psychology*, 14(7/8): 526-544.
- Lloyd, P. E., Dicken, P. 1990. *Location in space: Theoretical perspectives in economic geography*: New York: Harper and Row
- Long, B. S., and Mills, J. H. 2010. Workplace spirituality, contested meaning, and the culture of organization: A critical sensemaking account. *Journal of Organizational Change Management*, 23(3): 325-341.
- Lyness, K. S., and Judiesch, M. K. 2008. Can a manager have a life and a career? International and multisource perspectives on work-life balance and career advancement potential. *Journal of Applied Psychology*, 93(4): 789-805.
- Macey, W. H., and Schneider, B. 2008. The Meaning of Employee Engagement. *Industrial and Organizational Psychology*, 1(1): 3-30.
- Maher, M. F., and Hunt, T. K. 1993. Spirituality Reconsidered. *Counseling and Values*, 38(1): 21-28.
- Mark, P. K., Kriger, M. P., Bruce, J. H., and Hanson, B. J. 1999. A value-based paradigm for creating truly healthy organizations. *Journal of Organizational Change Management*, 12(4): 302.
- Markow, F., and Klenke, K. . 2005. The effects of personal meaning and calling on organizational commitment: an empirical investigation of spiritual leadership. *International Journal of Organizational Analysis*, 13(1).
- Markow, F., and Klenke, K. 1993. The effects of personal meaning and calling on organizational commitment: an empirical investigation of spiritual leadership. *International Journal of Organizational Analysis*, 13(1): 8-27.

- Marques, J. 2008. Spirituality at work: Internal Growth With External Challenges. *The Journal of Quality and Participation*: 24-27.
- Marques, J., Dhiman, S., and King, R. 2005. Spirituality in the Workplace: Developing an Integral Model and a Comprehensive Definition. *Journal of American Academy of Business, Cambridge*, 7(1): 81-91.
- Marques, J. F. 2010. Spiritually or politically driven behavior: differences in the workplace. *Development and Learning in Organizations*, 24(6): 12-12-16.
- Maslach, C., and Leiter, M. P. 1997. *The truth about burnout*: San Francisco: Jossey Bass.
- Maslach, C., Jackson, S. E., and Leiter, M. P. 1996. *Maslach burnout inventory manual*: Inc.
- Maslach, C., Schaufeli, W. B., and Leiter, M. P. 2001. Job burnout. *Annual Review of Psychology*, 52: 397- 422.
- Maslow, A. H. 1946. A theory of human motivation. *Twentieth century psychology: recent developments in psychology*, 22.
- Maslow, A. H. 1954. *Motivation and Personality*: New York: Harper and Row.
- Maslow, A. H. 1961. Peak-experiences as acute identity-experiences. *American Journal of Psychoanalysis*, 21(2): 254-260.
- Maslow, A. H. 1967. A theory of metamotivation: The biological rooting of the value-life. *Journal of Humanistic Psychology*, 7(2): 93.
- Mauno, S., Kinnunen, U., and Ruokolainen, M. 2007. Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior*, 70(1): 149-171.
- Mauritzen, J. 1988. Pastoral care for the dying and bereaved. *Death Studies*, 12(2): 111-122.
- May, D. R. 2003. Fostering the human spirit at work: Toward an understanding of the influences on employees' experienced meaningfulness at work.
- May, D. R., Gilson, R. L., and Harter, L. M. 2004. The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77(1): 11-37.
- McKnight, R. 1984. *Transforming Work: A Collection of Organizational Transformation Readings*: Miles River Press.
- Meijman, T. F., and Mulder, G. 1998. Psychological aspects of workload. *Handbook of work and organizational psychology: Work psychology*, 2: 5-33.
- Miller, R. 1991. Educating the True Self. *Journal of Humanistic Psychology*, 31(4): 53.
- Miller, W. R., and Thoresen, C. E. 2004. Spirituality, Health, and the Discipline of Psychology. *American Psychologist*, 59(1): 54-55.
- Milliman, J., Czaplewski, A. J., and Ferguson, J. 2003. Workplace spirituality and employee work attitudes: An exploratory empirical assessment. *Journal of Organizational Change Management*, 16(4): 426-447.
- Milliman, J., Ferguson, J., Trickett, D., and Condemi, B. 1999. Spirit and community at Southwest Airlines. *Journal of Organizational Change Management*, 12(3): 221-233.
- Mirvis, P. H. 1997. " Soul Work" in Organizations. *Organization Science*, 8(2): 193-206.
- Mitroff, I., Mitroff, I. A., and Denton, E. A. 1999. *A spiritual audit of corporate America: A hard look at spirituality, religion, and values in the workplace*: Jossey-Bass.
- Moreno-Jiménez, B., Mayo, M., Sanz-Vergel, A. I., Geurts, S., Rodríguez-Muñoz, A., and Garrosa, E. 2009. Effects of work-family conflict on employees' well-being: The moderating role of recovery strategies. *Journal of Occupational Health Psychology*, 14(4): 427-440.
- Morgan, G. 1997. *Imaginization: new mindsets of seeing, organizing and managing*: Berrett-Koehler Publishers.

- Mowday, R. T., Steers, R. M., and Porter, L. W. 1979. The measurement of organizational commitment. *Journal of Vocational Behavior*, 14(2): 224-247.
- Munene, J. C. 1995. Not on seat: An investigation of some correlates of organizational citizenship behaviour in Nigeria. *Applied Psychology: An International Review*, 44: 111-122.
- Neck, C. P., and Milliman, J. F. 1994. Thought self-leadership. *Journal of Managerial Psychology*, 9(6): 9-16.
- Nishiyama, K., and Johnson, J. V. 1997. Karoshi--death from overwork: occupational health consequences of Japanese production management. *International journal of health services: planning, administration, evaluation*, 27(4): 625.
- Nunnally, C. (1978), Psychometric theory, 2<sup>nd</sup> ed. New York: McGraw-Hill Book Company.
- Nur, Y. A., and Organ, D. W. 2006. SELECTED ORGANIZATIONAL OUTCOME CORRELATES OF SPIRITUALITY IN THE WORKPLACE. *Psychological Reports*, 98(1): 111-120.
- Organ, D. W. 1988. A Restatement of the Satisfaction-Performance Hypothesis. *Journal of Management*, 14(4): 547-557.
- Parayitam, S., and Kalra, N. 2008. FROM WORK-FAMILY CONFLICTS TO PSYCHOLOGICAL STRESS, JOB SATISFACTION AND TO LIFE SATISFACTION: A PROPOSED INTEGRATIVE MODEL. *Journal of Organizational Culture, Communication and Conflict*, 12(2): 49.
- Paul, E. B., III, Eric, H. K., and Edward, W. C. 2000. Organizational learning, knowledge and wisdom. *Journal of Organizational Change Management*, 13(6): 595.
- Pawar, B. 2009. Some of the Recent Organizational Behavior Concepts as Precursors to Workplace Spirituality. *Journal of Business Ethics*, 88(2): 245-261.
- Pearson, Q. M. 1998. Job satisfaction, leisure satisfaction, and psychological health. *Career Development Quarterly*, 46: 416-426.
- Peeters, M. C. W., Montgomery, A. J., Bakker, A. B., and Schaufeli, W. B. 2005. Balancing Work and Home: How Job and Home Demands Are Related to Burnout. *International Journal of Stress Management*, 12(1): 43-61.
- Petchsawang, P., and Duchon, D. 2009. Measuring workplace spirituality in an Asian context. *Human Resource Development International*, 12(4): 459-468.
- Pierce, J. L., Gardner, D. G., Cummings, L. L., and Dunham, R. B. 1989. Organization-based self-esteem: Construct definition, measurement, and validation. *Academy of Management Journal*: 622-648.
- Poole, E. 2009. Organisational Spirituality – A Literature Review. *Journal of Business Ethics*, 84(4): 577-588.
- Porath, C., Spreitzer, G., and Gibson, C. 2008. Social structural antecedents of thriving at work: A study of six organizations: University of Michigan working paper.
- Rain, J. S., Lane, I. M., and Steiner, D. D. 1991. A current look at the job satisfaction/life satisfaction relationship: Review and future considerations. *Human Relations*, 44(3): 287-307.
- Renesch, J., Harman, W. . 1992. *New traditions in business: Spirit and leadership in the 21st century*: San Francisco: Berrett-Koehler Store.
- Renn, R. W., and Vandenberg, R. J. 1995. The Critical Psychological States: An Underrepresented Component in Job Characteristics Model Research. *Journal of Management*, 21(2): 279.
- Rich, B. L., Lepine, J. A., and Crawford, E. R. 2010. JOB ENGAGEMENT: ANTECEDENTS AND EFFECTS ON JOB PERFORMANCE. *Academy of Management Journal*, 53(3): 617-635.
- Rothbard, N. P. 2001. Enriching or Depleting? The Dynamics of Engagement in Work and Family Roles. *Administrative Science Quarterly*, 46(4): 655-684.

- Russell, J. A. 1980. A circumplex model of affect. *Journal of Personality and Social Psychology*, 39(6): 1161-1178.
- Russell, J. A., and Barrett, L. F. 1999. Core affect, prototypical emotional episodes, and other things called emotion: Dissecting the elephant. *Journal of Personality and Social Psychology*, 76(5): 805-819.
- Ruth, B., and Nada, K.-K. 2002. Developing reflexive corporate leadership: The role of the non executive director. *Corporate Governance: The International Journal of Effective Board Performance*, 2(3): 32-36.
- Ryan, R. M., and Deci, E. L. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1): 68-78.
- Salanova, M., Agut, S., and Peiró, J. M. 2005. Linking Organizational Resources and Work Engagement to Employee Performance and Customer Loyalty: The Mediation of Service Climate. *Journal of Applied Psychology*, 90(6): 1217-1227.
- Salanova, M., Agut, S., and Peiro, J. M. 2005. Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90(6): 1217-1227.
- Salanova, M., and Schaufeli, W. B. 2008. A cross-national study of work engagement as a mediator between job resources and proactive behaviour. *International Journal of Human Resource Management*, 19(1): 116-131.
- Salmela-Aro, K., and Wiese, B. S. 2006. Communicating personal goals: Consequences for person perception in the work and family domains. *Swiss Journal of Psychology/Schweizerische Zeitschrift für Psychologie/Revue Suisse de Psychologie*, 65(3): 181-191.
- Schaufeli, W., and Salanova, M. 2011. Work engagement: On how to better catch a slippery concept. *European Journal of Work and Organizational Psychology*, 20(1): 39-46.
- Schaufeli, W. B., and Bakker, A. B. 2004. Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior*, 25(3): 293-315.
- Schaufeli, W. B., and Bakker, A. B. 2010. Defining and measuring work engagement: Bringing clarity to the concept.
- Schaufeli, W. B., Bakker, A. B., and Van Rhenen, W. 2009. How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30(7): 893-917.
- Schaufeli, W. B., Leiter, M. P., Maslach, C., and Jackson, S. E. 1996. The Maslach Burnout Inventory---General Survey, *MBI manual (3rd ed.)*: CA: Consulting Psychologists Press.
- Schaufeli, W. B., Salanova, M., González-Romá, V., and Bakker, A. B. 2002. The measurement of engagement and burnout: A confirmative analytic approach. *Journal of Happiness Studies*, 3(1): 71-92.
- Schaufeli, W. B., Salanova, M., González-Romá, V., and Bakker, A.B. 2002. The measurement of engagement and burnout: A confirmatory factor analytic approach. *Journal of Happiness Studies*, 3: 71-92.
- Shafranske, E. P., and Gorsuch, R.L. 1984. Factors associated with the perception of spirituality in psychotherapy. *Journal of Transpersonal Psychology*, 16: 231-241.
- Shaw, J. D., Duffy, M. K., Jenkins, G. D., and Gupta, N. 1999. Positive and Negative Affect, Signal Sensitivity, and Pay Satisfaction. *Journal of Management*, 25(2): 189-205.
- Shea, G. P., and Guzzo, R. A. 1987. Group Effectiveness: What Really Matters? *Sloan Management Review*, 28(3): 25-31.

- Sheep, M. L. 2004. ***Nailing down gossamer: A valid measure of the personorganization fit of workplace spirituality.***
- Sheep, M. L. 2006. Nurturing the whole person: The ethics of workplace spirituality in a society of organizations. ***Journal of Business Ethics***, 66(4): 357-375.
- Simpson, M. R. 2009. Engagement at work: A review of the literature. ***International Journal of Nursing Studies***, 46(7): 1012-1024.
- Sonnentag, S. 2003. Recovery, Work Engagement, and Proactive Behavior: A New Look at the Interface Between Nonwork and Work. ***Journal of Applied Psychology***, 88(3): 518-528.
- Sonnentag, S. 2011. Research on work engagement is well and alive. ***European Journal of Work and Organizational Psychology***, 20(1): 29-38.
- Spector, P. E. (2006). Method variance in organizational research. ***Organizational research methods***, 9(2), 221-232.
- Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., and Grant, A. M. 2005. A socially embedded model of thriving at work. ***Organization Science***: 537-549.
- Super, D. E. 1994. A life span, life space perspective on convergence. ***Convergence in career development theories: Implications for science and practice***: 63-74.
- Taris, T. W., and Feij, J. A. 2004. Learning and Strain Among Newcomers: A Three-Wave Study on the Effects of Job Demands and Job Control. ***Journal of Psychology***, 138(6): 543-563.
- Tart, C. 1975. ***Transpersonal psychologies***: New York: Harper and Row.
- Tatarkiewicz, W. 1976. ***Analysis of happiness***: Kluwer Academic Pub.
- Tepper, B. J. 2003. Organizational citizenship behavior and the spiritual employee. ***Handbook of workplace spirituality and organizational performance***: 181-192.
- Tepper, B. J., and Taylor, E. C. 2003. Relationships among supervisors' and subordinates' procedural justice perceptions and organizational citizenship behaviors. ***The Academy of Management Journal***, 46(1): 97-105.
- Thompson, W. D. 2000. Can You Train People to Be Spiritual? ***Training and Development***, 54(12): 18.
- Trinca, H., and Fox, C. 2004. Better than sex: How a whole generation got hooked on work: Random House. Australia.
- Turner, J. 1999. Spirituality in the workplace. ***CA Magazine***, 132(10): 41.
- Van den Broeck, A., Vansteenkiste, M., De Witte, H., and Lens, W. 2008. Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. ***Work and Stress***, 22(3): 277-294.
- van Steenbergen, E. F., Ellemers, N., and Mooijaart, A. 2007. How work and family can facilitate each other: Distinct types of work-family facilitation and outcomes for women and men. ***Journal of Occupational Health Psychology***, 12(3): 279-300.
- Vigoda-Gadot, E. 2007. Redrawing the boundaries of OCB? An empirical examination of compulsory extra-role behavior in the workplace. ***Journal of Business and Psychology***, 21(3): 377-405.
- Wageman, R. 1995. Interdependence and Group Effectiveness. ***Administrative Science Quarterly***, 40(1): 145-180.
- Westman, M., Etzion, D., and Danon, E. 2001. Job insecurity and crossover of burnout in married couples. ***Journal of Organizational Behavior***, 22(5): 467-481.
- Williams, L. J., and Anderson, S. E. 1991. Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. ***Journal of management***, 17(3): 601.
- Wisely, D. S., and Lynn, E. M. 1994. Spirited connections: Learning to tap the spiritual resources in our lives and work. ***Spirit at work: Discovering the spirituality in leadership***: 100-131.

- Wong, P. T. 1998. Implicit theories of meaningful life and the development of the personal meaning profile, *The Human Quest for Meaning: A handbook of psychological research and clinical applications*: New Jersey: Lawrence Erlbaum.
- Wuthnow, R. 1996. Poor Richard's principle: Princeton, NJ: Princeton University Press.
- Xanthopoulou, D., Bakker, A. B., Heuven, E., Demerouti, E., and Schaufeli, W. B. 2008. Working in the sky: A diary study on work engagement among flight attendants. *Journal of Occupational Health Psychology*, 13(4): 345-356.
- Xanthopoulou, D., Bakker, A., Demerouti, E., Schaufeli, W., Taris, T., and Schreurs, P. 2006. Different combinations of job demands and resources predict burnout. *manuscript submitted for publication*.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., and Schaufeli, W. B. 2007a. The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14(2): 121.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., and Schaufeli, W. B. 2009a. Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74(3): 235-244.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., and Schaufeli, W. B. 2009b. Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82(1): 183-200.
- Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Tans, T. W., and Schreurs, P. J. G. 2007b. When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology*, 22(8): 766-786.
- Yukl, G. (2006). Leadership in organizations 6<sup>th</sup> ed. New Hersey: Pearson Prentice Hall

## Appendix A: Survey Study on the Working Environment in Singapore



### INFORMATION SHEET

Dear Sir/Madam,

Re: Survey Study on the Working Environment in Singapore

You are invited to take part in a research project on a survey study on the working environment in Singapore.

If you are able to participate in this study, please respond to the attached questionnaire entitled: *A Survey Study on the Working Environment in Singapore*. This questionnaire will take about 15 minutes of your time. The survey contains questions relating to your perceptions of your workplace, your behaviours in the workplace and some personal information.

In the personal information section, you will be asked for your name and contact number. Please be assured that your contact details will be kept strictly confidential and will be used solely for a subsequent verification study (if necessary). This verification involves you being contacted to verify that you have filled out this questionnaire personally. Your completed survey will be securely stored under lock and key and the consolidated data will be password protected - only the undersigned will have access to it.

Your views are highly valuable. Participation in this research is entirely voluntary and carries no monetary benefits for completion. However, your participation is greatly appreciated as it will help deepen our understanding of the working environment in Singapore. Refusal to participate will involve no penalty. You can therefore discontinue participation at any time without penalty or loss of accrued benefits. By completing and submitting the questionnaire, you have indicated your consent to participate in this study and that you are at least 18 years of age. There are no foreseeable risks or discomfort that you will be exposed to as a result of your participation in this study. If you have any queries regarding your decision to participate, please contact the IRB Secretariat Ms. Stephanie Tan at [irb@smu.edu.sg](mailto:irb@smu.edu.sg) or telephone (+65) 6828 1925.

Also, the data from the study will be used only for the purpose of academic research. The research publication will not mention the nature of the work of your organization where this study is conducted. If you need any clarification on this questionnaire, please feel free to contact me via email at [eileen.lai.2002@mm.smu.edu.sg](mailto:eileen.lai.2002@mm.smu.edu.sg) or via mobile phone at (+65) 9666 2956.

Thank you very much for your participation.

Yours faithfully,

A handwritten signature in black ink, appearing to read "Eileen Lai", positioned above a horizontal line.

Ms. Eileen Lai (MSc Student)  
Singapore Management University  
Lee Kong Chian School of Business

A handwritten signature in black ink, appearing to read "Gilbert Tan", positioned above a horizontal line.

Dr. Gilbert Tan (Thesis Supervisor)  
Associate Professor of Management Practice  
Singapore Management University  
Lee Kong Chian School of Business



## **Section A:**

Below is a list of statements that describes one's perceptions about his/her organization. Please indicate the extent to which you agree or disagree with each of the following statements using the scale below:

- 1 = Strongly Disagree (SD)  
 2 = Disagree (D)  
 3 = Neutral (N)  
 4 = Agree (A)  
 5 = Strongly Agree (SA)

Statements	SD	D	N	A	SA
1. This organization enables me to experience joy in work	1	2	3	4	5
2. My spirit is energized by work in this organization	1	2	3	4	5
3. This organization gives me work that is connected to what I think is important in life	1	2	3	4	5
4. The conditions in this organization allows me to look forward to going to work	1	2	3	4	5
5. This organization enables me to see a connection between work and the social good	1	2	3	4	5
6. This organization enables me see what gives my work personal meaning	1	2	3	4	5
7. This organization values working cooperatively with others	1	2	3	4	5
8. This organization allows me to feel part of a community	1	2	3	4	5
9. In this organization, colleagues support each other	1	2	3	4	5
10. In this organization, I am free to express my opinions	1	2	3	4	5
11. This organization link employees with a common purpose	1	2	3	4	5
12. My colleagues in this organization genuinely care about each other	1	2	3	4	5
13. This organization feels like being part of a family	1	2	3	4	5
14. In this organization, I feel positive about the values we share	1	2	3	4	5
15. This organization is concerned about the poor	1	2	3	4	5
16. This organization cares about all its employees	1	2	3	4	5
17. This organization has a conscience	1	2	3	4	5
18. This organization enables me to feel connected with its goals	1	2	3	4	5
19. This organization is concerned about employees' health	1	2	3	4	5
20. This organization allows me to feel connected with its mission	1	2	3	4	5

21. This organization cares about whether my spirit is energized	1	2	3	4	5
22. I can feel hopeful about life in this organization	1	2	3	4	5
23. This organization allows me to rely on my spiritual values to influence the choices I make	1	2	3	4	5
24. This organization allows me to show the spiritual side of me	1	2	3	4	5
25. Prayer is an important part of my life in this organization	1	2	3	4	5
26. I care about the spiritual health of my colleagues in this organization	1	2	3	4	5

## **Section B:**

Below is a list of statements about how a person feels at work. Please indicate the extent to which you agree or disagree with each of the following statements using the scale below:

- 1 = Strongly Disagree (SD)  
2 = Disagree (D)  
3 = Neutral (N)  
4 = Agree (A)  
5 = Strongly Agree (SA)

Statements	SD	D	N	A	SA
1. I work with intensity on my job	1	2	3	4	5
2. I exert my full effort to my job	1	2	3	4	5
3. I devote a lot of energy to my job	1	2	3	4	5
4. I try my hardest to perform well on my job	1	2	3	4	5
5. I strive as hard as I can to complete my job	1	2	3	4	5
6. I exert a lot of energy on my job	1	2	3	4	5
7. I am enthusiastic in my job	1	2	3	4	5
8. I feel energetic at my job	1	2	3	4	5
9. I am interested in my job	1	2	3	4	5
10. I am proud of my job	1	2	3	4	5
11. I feel positive about my job	1	2	3	4	5
12. I am excited about my job	1	2	3	4	5
13. At work, my mind is focused on my job	1	2	3	4	5
14. At work, I pay a lot of attention on my job	1	2	3	4	5
15. At work, I focus a great deal of attention on my job	1	2	3	4	5
16. At work, I am absorbed by my job	1	2	3	4	5
17. At work, I concentrate on my job	1	2	3	4	5
18. At work, I devote a lot of attention to my job	1	2	3	4	5

## Section C:

Below is a list of statements describing a person's behaviours at work. Please indicate the extent to which you agree or disagree with the following statements that describes how you behave at work.

- 1 = Strongly Disagree (SD)  
 2 = Disagree (D)  
 3 = Neutral (N)  
 4 = Agree (A)  
 5 = Strongly Agree (SA)

Statements	SD	D	N	A	SA
1. I adequately complete my assigned duties	1	2	3	4	5
2. I fulfil my responsibilities as specified in my job description	1	2	3	4	5
3. I perform tasks that are expected of me	1	2	3	4	5
4. I am able to meet formal performance requirements of the job	1	2	3	4	5
5. I engage in activities that directly affect my performance	1	2	3	4	5
6. I neglect aspects of the job I am obliged to perform	1	2	3	4	5
7. I fail to perform essential duties	1	2	3	4	5
8. I help others who are absent	1	2	3	4	5
9. I help others with heavy work loads	1	2	3	4	5
10. I assist my supervisor with his/her work when not being asked to do so	1	2	3	4	5
11. I take time to listen to co-workers' problems and worries	1	2	3	4	5
12. I go out of my way to help new employees	1	2	3	4	5
13. I take a personal interest to help other employees	1	2	3	4	5
14. I pass along information to my colleagues	1	2	3	4	5
15. My attendance is above the norm	1	2	3	4	5
16. I give advance notice if I am unable to go to work	1	2	3	4	5
17. I take undeserved work breaks	1	2	3	4	5
18. I spend a great deal of time on the phone on personal conversations	1	2	3	4	5
19. I complain about insignificant things at work	1	2	3	4	5
20. I conserve and protect organizational property	1	2	3	4	5
21. I adhere to informal rules devised to maintain order	1	2	3	4	5

22. I suggest new ways to achieve goals or objectives	1	2	3	4	5
23. I come up with new and practical ideas to improve performance	1	2	3	4	5
24. I search out new technologies, processes, techniques, and/or product ideas	1	2	3	4	5
25. I suggest new ways to increase quality	1	2	3	4	5
26. I am a good source of creative ideas	1	2	3	4	5
27. I am not afraid to take risks	1	2	3	4	5
28. I promote and champion ideas to others	1	2	3	4	5
29. I exhibit creativity on the job when given the opportunity to	1	2	3	4	5
30. I develop adequate plans and schedules for the implementation of new ideas	1	2	3	4	5
31. I often have new and innovative ideas	1	2	3	4	5
32. I come up with creative solutions to problems	1	2	3	4	5
33. I often have a fresh approach to problems	1	2	3	4	5
34. I suggest new ways of performing work tasks	1	2	3	4	5

## **Section D:**

Please fill in your background information or check ☒ the appropriate box below.

1. Name: \_\_\_\_\_ 2. Contact number: \_\_\_\_\_

3. Email address: \_\_\_\_\_

4. Age: \_\_\_\_\_ years

5. Gender: ☐ Male ☐ Female

6. Number of years of working experience: \_\_\_\_\_ years

7. Length of service in present organization: \_\_\_\_\_ years

8. Nature of organization:

- ☐ Private Sector (Foreign-owned)
- ☐ Private Sector (Locally-owned)
- ☐ Government-Linked Company
- ☐ Civil Service/ Government Sector
- ☐ Non-profit Organizations
- ☐ Others: \_\_\_\_\_

9. Position in organization:

- ☐ Owner/ Partner
- ☐ Top Management
- ☐ Upper/ Middle Level
- ☐ Middle Level
- ☐ Lower/ Middle Level
- ☐ Junior Level

10. Education:

- ☐ Graduate degree or equivalent
- ☐ Degree or equivalent
- ☐ Diploma or equivalent
- ☐ Junior College or equivalent
- ☐ Secondary or equivalent
- ☐ Others: \_\_\_\_\_

11. Religion:

- ☐ Buddhist
- ☐ Catholic
- ☐ Christian
- ☐ Hindu
- ☐ Muslim
- ☐ Taoist
- ☐ None
- ☐ Others: \_\_\_\_\_

The End, Thank you for your participation!

## Appendix B: IRB Approval Letter



15 December 2010

Eileen Lai Pei Shan  
Lee Kong Chian School of Business

Dear Eileen

**IRB APPROVAL OF RESEARCH  
CATEGORY 2: EXPEDITED REVIEW**

**Title of Research: The Engagement of a Spirited Person: Does Work Engagement Mediate the Impact of Spirituality at Work and Performance?**  
**SMU-IRB Approval Number: IRB-10-0098-A0103**

Thank you for your IRB application for the above research, which we received on 10 November 2010 and the latest revised application received on 30 November 2010.

Please be informed that your application was approved on 08 December 2010. I am pleased to let you know that, based on the description of the research in your IRB application, the IRB has determined that your research falls under Category 2 and has approved your application.

Please note the following:

1. Indicate the above SMU-IRB approval number in all your correspondence with the IRB on this research.
2. If any adverse events or unanticipated problems involving human subjects occur during the course of the research project, you must complete in full the SMU-IRB Adverse Events Report Form (see SMU-IRB website) and submit it to the SMU-IRB within 24 hours of the event.
3. If you plan to modify your original protocol that was approved by the SMU-IRB, you must complete in full the SMU-IRB Protocol Modification Request Form (see SMU-IRB website) and submit it to the SMU-IRB to seek approval before implementing any modified protocol.
4. This IRB approval for your research is valid for one year (12 months) from the date of this letter. If you plan to extend your research project beyond one year from the date of the IRB approval, you must submit a request to renew the research protocol using the Continuation Review Form (see SMU-IRB website).

If you have any queries, please contact the IRB Secretariat Ms Stephanie Tan at [irb@smu.edu.sg](mailto:irb@smu.edu.sg) or telephone 65-6828-1925.

Yours Sincerely,

A handwritten signature in black ink, appearing to read "Norman Li".

Norman Li  
Chairman  
Institutional Review Board